

Military Affairs

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LOGISTICIAN LUTES

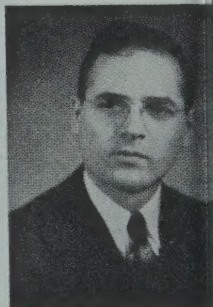
AMONG OUR CONTRIBUTORS



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Major Richard M. Leighton has been connected with the historical program of the Army Service Forces since October 1943 at first in the Office of the Director of Plans and Operations, Maj. Gen LeRoy Lutes, and later in the Office of the Commanding General. During this period he was an associate of Col. John D. Millett, Chief Historian of the Army Service Forces. Leighton's specialty being the history of logistical support of overseas operations. Earlier in the war Leighton wrote technical manuals and other training literature for the Office of the Quartermaster General and engaged in public relations work at Camp Lee. Before the war he taught modern European history at the University of Cincinnati, Cornell University, and Brooklyn College. He holds a Ph.D. degree in history from Cornell University, where he studied under the late Carl L. Becker.

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Military Affairs

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COVER: Lieutenant General LeRoy Lutes, as a brigadier and major general, was Brehon B. Somervell's ace planner from the time Somervell first assumed command of the Services of Supply (later Army Service Forces) to the end of the war in Europe. During this period Lutes was Director of Operations, Services of Supply, and later Director of Plans and Operations, Army Service Forces. In April 1945 he became Chief of Staff and Deputy to the Commanding General, Army Service Forces, and on January 1, 1946, succeeded Somervell as Commanding General, Army Service Forces. When Army Service Forces was abolished under authority of the Executive Order of May 13, 1946, Lutes became Director of Service, Supply, and Procurement on the War Department General Staff, a newly important post which he still holds. For some light on the problems Lutes had to contend with during the war and what he achieved see Major Leighton's article, this issue.



MAJOR GENERAL C. P. GROSS
Chief of Transportation, 1942-1945

PREPARATION FOR INVASION

The Problem of Troop and Cargo Flow Before D-Day

BY MAJOR RICHARD M. LEIGHTON

This article is a condensation of a considerably larger study written by the author under the historical program of the Army Service Forces: "Cargo-Shipping Problems in Mounting the European Invasion, 1943-1944." While the main outlines, as well as many detailed aspects, of the preparations for the European invasion are familiar to most readers of the enormous literature of World War II, it is believed that the present approach offers a fertile field for further study. It involves writing from the vantage point, primarily, of the Army Service Forces, the War Department organization which, under the direction of the General Staff, planned and executed the flow of troops and cargo to England before D-Day. Consequently, no attempt has been made to examine the source records of high-level strategic planning or operations; the treatment of these subjects is limited deliberately to the amount and kind of information which was available to Army Service Forces staff officers and which influenced their decisions. This very limitation of information was a part of the logistical problem in the invasion build-up.

The fluctuating relationship between the flow of troops and of cargo was the fundamental logistical factor in this operation. In order to fulfill the long-range objectives of the program, a certain final balance had to be aimed at in the flow of troops and cargo. Any deviation from the current balance in this flow—and circumstances required many—necessitated a later adjustment. All the problems of the invasion preparation program had to be considered in the light of this overriding factor. In this sense, then, the

present article is a study of the logistics of the invasion build-up.

Full citation of sources has not been attempted. While all the information here used has been freed of security restrictions, the more detailed study on which it is based contains classified matter, and consequently is not as yet available to the general reader. The author sees no useful purpose in citing documents to which the reader cannot obtain access. On the other hand, since the study is based entirely on original sources, there are no citations to secondary works except those published within the War Department.

THE BACKGROUND

Although American troops and equipment began to arrive in England soon after Pearl Harbor, the massive build-up for the Continental invasion of 1944, properly speaking, dates back only to the spring of 1943. This preparation was the second phase of operation BOLERO, which was to culminate in the cross-Channel assault itself, OVERLORD. The first, abortive phase of BOLERO had as its objective an invasion in April 1943, operation ROUNDUP, by a combined force which was to include some twenty American divisions. Preparations under this plan continued into the fall of 1942, through the vicissitudes of planning which wavered between the several alternatives of a surprise Channel assault in 1942 (SLEDGEHAMMER), the several disputed variants of the North African operation (TORCH), and an eastern Mediterranean diversion urged by the British. Even after TORCH had been decided upon in

July, the flow of troops and cargo continued under the BOLERO plan, with the understanding on this side of the Atlantic that TORCH was to be mounted largely from the British Isles.¹

This scheme was reversed early in August by the decision to send Task Force A and many of the follow-up convoys for TORCH directly from the United States. By mid-September the projected troop strength of the United Kingdom had been set at about 400,000, and the target date for the cross-Channel operation had been postponed almost indefinitely. This plan was a compromise between the British desire to concentrate maximum strength in the British Isles as insurance against another German invasion attempt, and the American concern with other commitments in the Mediterranean and the Pacific. ROUNDUP-BOLERO was to continue "for purposes of deception."

These developments in the fall of 1942 tended to deflect the supply effort of the Army Service Forces (then Services of Supply) away from the United Kingdom, and, in the minds of Army Service Forces planners, to postpone indefinitely the Continental invasion. The easy success of the initial North African landings, the swift penetration into Tunisia in November, followed by the pouring of German troops across the Sicilian narrows and the temporary stabilization of the military situation, all tended to strengthen this prospect. To be sure, the strike at the enemy's southern flank had fallen short of full success, and a long, arduous campaign loomed ahead. But a more important long-range objective had been won: the enemy had seized the bait and committed large forces to the new theatre, which might well become a trap for them. From North Africa there

were many possible avenues into Axis Europe. So appeared the situation at the end of 1942. The Army Service Forces was preoccupied with logistical problems in the Mediterranean, and the European theatre had become virtually a secondary arena.

Casablanca abruptly altered this prospect. While the deliberations there late in January were mainly concerned with operations designed to exploit the initial success of TORCH, the conferees also revived the old BOLERO plan. This plan, in its new form, envisaged deployment of almost a million troops in the British Isles by the end of 1943, and about 1,400,000 by the spring of 1944, for a cross-Channel assault. The deployment was to begin as a trickle during the first quarter of the year, with shipments of only about 80,000 men. In the second quarter it would swell rapidly to 169,000, and reach a torrent during the summer months, when 375,000 were to be moved. The flow would taper off somewhat toward the end of the year, with 359,000 scheduled for the last three months.

Here was the germ of a problem which was to dominate the whole BOLERO program. The rate of troop flow indicated in the above schedule was determined by a combination of strategic and logistical factors. In shipping, as in all resources, there was from the outset a keen competition between BOLERO and the series of Mediterranean operations launched by TORCH. It was a competition particularly difficult to reconcile, since it involved, not a clear-cut choice between balanced alternatives, but the vexatious one between a primary operation with a relatively distant target date, and a chain of secondary but more imminent operations. This choice had to be constantly reappraised and reconfirmed over a period of a year and a half. The Axis reaction to our landings in North Africa had been tantamount to a sortie in force from Fortress Europe. It could be

¹More detailed accounts of the planning in 1942 for European and North African operations can be found in General Marshall's Second and Third Biennial Reports. The present sketch is based largely on materials produced under the War Department historical program.



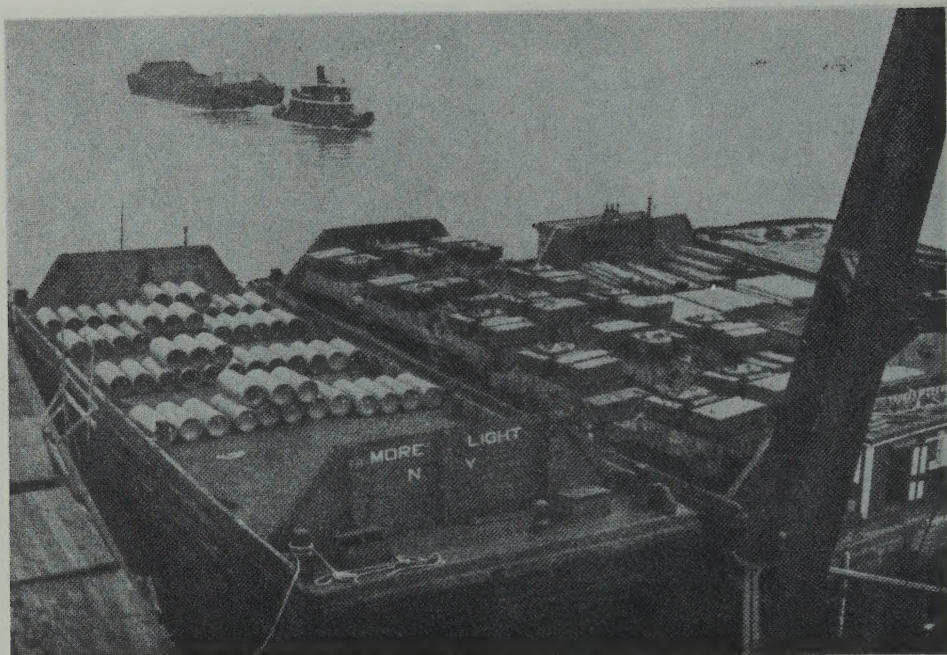
Equipment and supplies ready for loading fill the entire New York dock area.

turned to our advantage if the enemy could be lured into pouring enough men and matériel across the Mediterranean and later into Sicily and Italy to weaken the defenses of Europe. On the other hand, we ourselves had to resist the temptation to allow Mediterranean operations to become our major effort and thus fatally weaken the cross-Channel invasion. Accordingly, the Casablanca decisions did not contemplate a major troop movement to the United Kingdom until the fall of 1943; in the meantime Tunisia, Sicily, and subsequent "post-HUSKY" operations would absorb most of our newly trained divisions.²

Logistical factors supported this decision. The United Nations shipping pool in the

spring of 1943 showed an unbalance between troop and cargo shipping in favor of the latter, resulting largely from the success of the anti-submarine campaign. A conversion construction program to restore the balance had been launched, but its effects were not to be felt for some time. Even had more trained divisions been available, the supply of troopers was inadequate to support an immediate double flow of troops to both the Mediterranean and the British Isles. Finally, and incidentally, there would have been no advantage in an early concentration of forces in the United Kingdom. Training, except in the final rehearsal stages, could be accomplished more effectively in the cantonments of the United States, and the maintenance of hundreds of thousands of idle troops in the already burdened United Kingdom pre-

²For all the foregoing see Marshall, *Third Biennial Report*.



Tugboats move loaded lighters about New York harbor.

sented problems better deferred to a later date.

As a result of all these considerations, the new BOLERO program was to be, in its early and middle phases, a build-up of supplies and equipment rather than of troops. This prospect, however, brought back unpleasant memories to the Army Service Forces and theatre supply people. Advance shipment of equipment ahead of troops had been attempted on a large scale to the United Kingdom in 1942 with unhappy results; in the absence of adequate service troops to handle and inventory the material, it had been buried in depots throughout the British Isles, and nineteen shiploads of replacement equipment had had to be rushed to General Eisenhower on the eve of the North African landings. This experience had left its mark on

the minds of General Staff supply planners, and constituted a serious mental hazard in any subsequent consideration of large-scale advance shipments.

Some Army Service Forces officials recognized, however, that this method of oversea supply had not been given a fair trial in the TORCH episode. Actually the supposedly standard practice of synchronized troop and cargo shipments was so in theory only; at best the synchronization was never more than approximate, and it was always modified freely to meet circumstances. Except in "combat" loading, in which equipment was loaded in the same ship or group of ships with the troop unit to which it belonged, in such a way that it could be used by the troops immediately on landing, cargo ships leaving port at about the same time as the

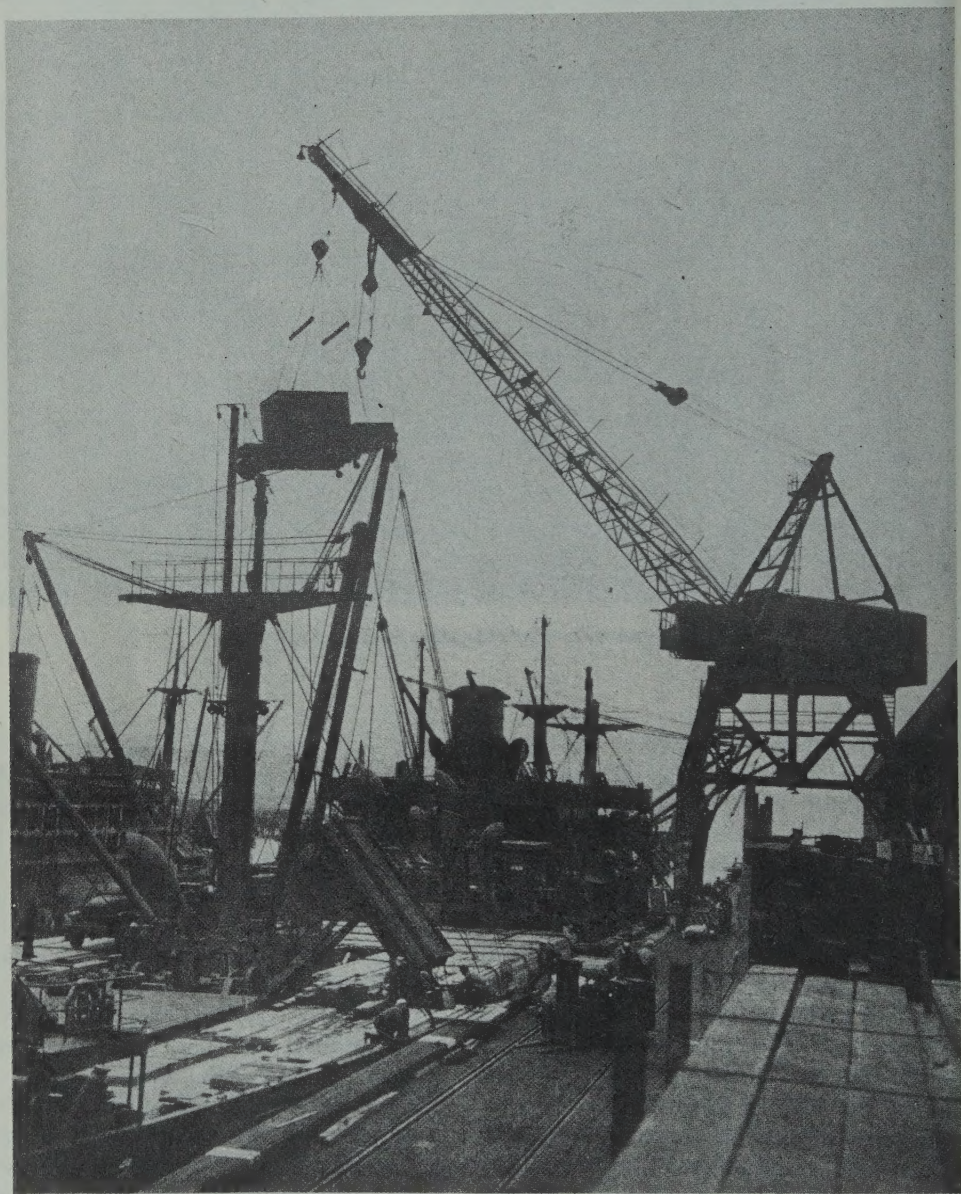


Rations are stacked the whole length of a pier.

using troops usually arrived at the destination days or weeks later than the troops. This was frequently expedient, however, since the troops might be required to assist in unloading, assembling, distributing, unpacking, and servicing their equipment. In the case of areas like the Middle East or Persian Gulf, distant theatres where our forces had a purely supply and administrative mission, the troops sailed on fast, unescorted ships, usually converted liners, which could discharge quickly and return for another load. Cargo, meanwhile, was loaded systematically on slow freighters sailing in large, escorted convoys. This system made maximum use of limited shipping. On the other hand, a small task force occupying a remote islet in the South Pacific had to be prepared to defend itself if necessary soon after arrival; at the same

time, its mission was to construct a base or fueling station as rapidly as possible. Accordingly, some of its equipment and supplies went with the initial convoy, the remainder in follow-up shipments.

The basic consideration was that the shipment of cargo and of troops were fundamentally different, requiring different techniques of loading and different kinds of ships in order to achieve reasonable economy of space, labor, facilities, and time. In a long-range program like BOLERO, temporary lack of balance between the flow of troops and of cargo, even on a large scale, was of little moment, since there was time to adjust them before the target date. Wholly apart from the necessities of strategic plans, the logistics of BOLERO dictated the greatest possible flexibility in the relation between troop and



Lumber and miscellaneous cargo being loaded aboard a freighter.

cargo flow.

The need, then, for heavy advance shipments of cargo, before the troop movements scheduled for the fall of 1943, seemed inherent both in the over-all plan and in the immediate circumstances. Nevertheless, the disposition of the War Department General Staff was at first against this policy, at least in the form of long-range commitments. There was an understandable reluctance to stockpile large quantities of matériel overseas which could not be used for more than a year and which might well be suddenly needed elsewhere. It required certain developments in the weeks immediately following Casablanca to alter this attitude.

TROOP AND CARGO SCHEDULES IN THE SPRING OF 1943

Only three weeks after Casablanca, it became apparent which way the wind was blowing. On 22 February the General Staff wired Lieutenant General Andrews, the European Theatre commander, that it appeared shipping available for the United Kingdom would be "nothing" for March and April, because of the urgency of the situation in "another theatre." "Another theatre" was, of course, North Africa, where feverish preparations were under way to pin down and destroy the large German forces already committed there. Immediately after the Casablanca meeting, Lieutenant General Somervell, Commander of the Army Service Forces, who was conferring with General Eisenhower in North Africa, wired instructions to Washington to prepare a special convoy, to sail in March loaded with wheeled vehicles, engineer and communications equipment. The response to this order, stating that the depots of the United States had been ransacked and that the needed supplies would be sent on time, ended with the celebrated remark that if General Somervell wanted the Pentagon Building as well, a little more time would be needed. This convoy brought to the Allied forces massing in Tu-

nisia the decisive weight and mobility which they had lacked in the initial penetration.

In mid-February, also, General Eisenhower called for 160,000 more troops to be spaced over four convoys from the end of March into June. Later he stipulated that these must be supplied by the end of May. These demands, of course, were superimposed on the preparations already under way for the attack on Sicily (operation HUSKY), for which a combat-loaded convoy was scheduled immediately following the last of the above four convoys.

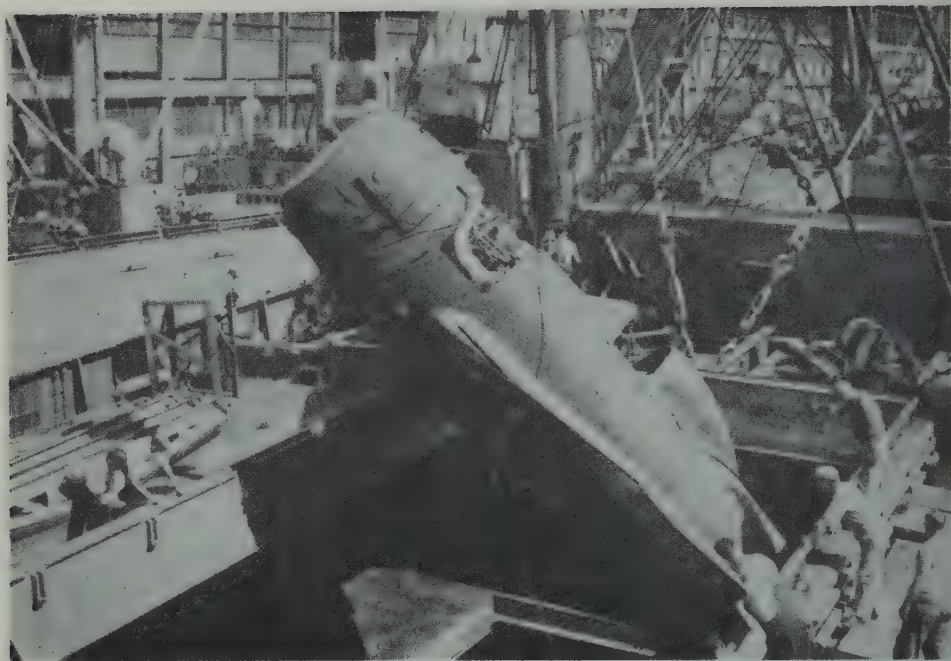
These added troop movements meant heavy increases in cargo shipments to the Mediterranean. In March the cargo convoy cycle and the complement of normal convoys to the Mediterranean were rearranged so that five convoys, totaling 225 sailings, would now occupy the space of time formerly planned for three convoys with 180 sailings. As for the four cargo convoys already referred to, successive additional requests from the theatre pushed the total number of ships scheduled from 142 to 169. Convoys normally contained about 45 ships; by 26 April the last convoy had been augmented to 81 ships.

The effect of this progressive draining of troops and matériel, and of the ships that transported them, into the Mediterranean, can be seen in the following tabular comparison between the flow to that theatre and to the European.³

TABLE 1

Month	CARGO (in measurement tons)		TROOPS	
	To United Kingdom	To North African Theatre	To United Kingdom	To North African Theatre
January	129,694	465,762	14,443	29,548
February	92,948	653,300	2,921	43,692
March	115,856	643,541	680	38,576
April	134,950	1,263,565	3,312	108,108
May	251,832	1,063,742	40,055	32,236
June	542,001	897,590	32,848	49,897

³ *Annual Report of the Army Service Forces, Fiscal Year 1944* (Washington: Govt. Printing Office, 1944), pp. 14-15.



A fighter plane is lowered into the hold of a freighter.

It can be seen from the table that the chief effect of the North African requirements on the BOLERO build-up was felt in the months of February, March, and April, and that it was more pronounced in the case of troops than of cargo, a result of the greater scarcity of troop shipping.

Under such pressure, the tentative troop movement schedule drawn up early in February collapsed. Of the 80,000 troops to be moved during January, February, and March, under the Casablanca plan, only about 18,000 actually sailed. A new shipping plan, drawn up early in March, provided for movement of about 77,250 troops in April, May, and June, instead of the 169,000 scheduled earlier; the planned summer movements were augmented from 375,000 to 526,750, in order to take advantage of

the long daylight hours. For the final quarter, only 230,000 were scheduled.

But this schedule was to fare little better than its predecessors. March and April saw deep cuts in troop movements to the European theatre, and correspondingly heavier movements to the Mediterranean. True, shipments in May and June did bring the total of United Kingdom movements for the quarter almost to the 77,250 originally planned. But the sudden and drastic reduction of sailings in March and April had freed the cargo space allocated for the accompanying equipment, at the rate of about 150,000 ship tons per month, unexpectedly throwing upon the Army Service Forces the problem of finding additional cargo to fill this space. At the same time, by late in March, it appeared that the major portion of the troop lift for 1943



Loading goes on around the clock.

would not be forthcoming until late in the third and during the fourth quarter. Summer troop movement schedules fell from 526,000 to 350,000, the balance being pushed back toward the end of the year.

PRELIMINARY PLANNING, FEBRUARY-MAY 1943

All indications pointed, then, to the necessity of shipping considerable quantities of equipment to the United Kingdom in advance of troops. The General Staff found itself under increasing pressure from both the theatre and the Army Service Forces to revise its policy of synchronized shipment of troops and matériel. During February and the first part of March the theatre commander, Lieutenant General Andrews, repeatedly urged upon the War Department

the importance of sending equipment far enough ahead of the troops to be issued immediately. As it was, it arrived sometimes 80 to 120 days after the troops. At the same time, the Army Service Forces presented its arguments for a "preshipment" program, as it was called, with a view to completing as much of the cargo build-up for BOLERO as possible during 1943, particularly during the long days and favorable weather of summer. By 16 March a cautious endorsement of preshipment in principle had been secured.

The misgivings expressed at this stage in various quarters accurately foreshadowed the principal difficulties which the preshipment program was to encounter. Foremost, of course, were fears that the warehousing chaos of the preceding summer and fall would be repeated. Because of the critical production

situation, the War Department could not afford to risk loss, spoilage, or transfer of any equipment shipped in advance. There would be no surplus of equipment to duplicate shipments. That the theatre supply people were equally alive to this risk was shown by the urgency with which from the beginning they pleaded for immediate shipments of service troops to handle incoming goods.

Could enough matériel be produced and brought to bear to support the several concurrent and overlapping operations which our strategy contemplated? Inefficient supply methods had almost wrecked TORCH, a relatively modest operation which had had no major competitor. BOLERO, on the contrary, would have to compete with numerous other requirements for precious matériel. War Department messages to the theatre repeatedly stressed the needs of troops training in the United States and of other theatres, the critical state of production, the precarious balance of shipping.

As an alternative to the hazards of advance stockpiling in the British Isles, the General Staff had hoped at first to augment the flow of both troops and matériel during the summer. This was the purpose of the troop movement schedule of mid-March already mentioned. Shipment of 526,000 troops with their initial and replacement equipment during the three summer months would have appreciably lessened the burden on ports, shipping, and depots the following winter and spring. But this possibility faded almost as soon as contemplated; there was not enough troop shipping, even if the needed troops could have been trained and equipped.

Should equipment be shipped in bulk, or in sets for type units? Here again, the weight of precedent and habit was on the side of the latter method, since it was customary to reissue equipment to units as soon as possible after they landed, usually without storing it in warehouses. On the other hand, the great advantage of preshipment lay in

the possibility of transferring depot stocks from the United States to the British Isles to be reissued there as needed. This virtually precluded the possibility of storing advance-shipped equipment in unit sets, a fantastically wasteful method of storage. The same consideration applied, of course, to stowage on freight cars or in a ship's hold. Advance shipments in bulk offered large economies in loading.

But the most conclusive argument for bulk shipments was the impossibility at this time of obtaining an accurate forecast of the troop movement schedule upon which long-range advance shipments of unit sets might be based. In March 1943 the General Staff had only the vaguest notion of the composition of the force to be built up in the British Isles by the end of the year. This instability of the troop basis made any planning for advance shipments the sheerest guesswork, but shipment of supplies in bulk removed at least some of the difficulty. Under this method fairly extensive changes could be made in an initial troop basis, without too greatly upsetting the schedule for shipment of matériel, so long as total quantities and over-all proportion of major categories did not alter too greatly.

The working out of a detailed preshipment plan to implement the General Staff's general authorization of 16 March reflects the effort to overcome all these difficulties. The theatre took the lead. As early as 20 March, anticipating an inquiry dispatched by the Army Service Forces on that very day, General Andrews proposed shipments to arrive from 30 to 45 days in advance of troops. Moreover, he stressed the important connection between advance shipment and bulk loading: if equipment could not be shipped early enough to be stored in bulk for future reissue, it would be better to send it "force-marked" (i.e., for specific units) to arrive simultaneously with the troops and to be issued immediately.



* *Troops file aboard a transport.*

The War Department was still reluctant to make the plunge. The first operational plan for preshipment, approved by the General Staff on 16 April, provided for shipment of most types of initial equipment only 30 days before a unit sailed, and force-marked. This meant they would arrive only a few days, if at all, before the troops who were to use them. Bulk advance shipments applied only to certain listed categories: Class IV supplies (i.e., equipment other than that issued under tables of basic allowances), combat replacement supplies for the entire troop basis through 31 December 1943, and boxed general purpose vehicles, also for the 1943 troop basis. These were categories shipment of which would not interfere "materially" with training of units in the United States or with other important operations, and "for

which production exceeds current requirements."

These provisions underlined the low priority assigned to BOLERO, which was to shape its progress for the next seven months. North African operations, training requirements for troops in the United States, the bombing offensive from England, and two major operations in the Pacific—all these had first call on equipment and supplies before the build-up of ground forces in the United Kingdom. This arrangement, of course, was part of the grand strategic plan, into which any scheme for handling the flow of troops and cargo to the British Isles must fit. Nevertheless, the necessity of low priority in the over-all strategy was to be the fundamental problem of the BOLERO program.

Only slightly less fundamental, and almost equally at the mercy of higher strategy, was the problem of crystallizing the troop basis. The General Staff had been unable to produce a firm troop list for 1943 before the 17 April plan went into operation, and consequently only a makeshift list could be published. The list of units scheduled to move up to October was fairly detailed, covering fourteen typewritten pages. But this was the period of light troop movements; the only major units were two infantry and one airborne divisions, including one infantry division already in the United Kingdom; the remainder were largely service and air force units. By contrast, there were scheduled for October-December movement three infantry, one motorized, three armored and one airborne divisions, eight tank battalions, sixty-two antiaircraft battalions, and, of aviation, three heavy, four medium, and seven light bomber groups, fifteen fighter groups, three observation groups, and one photo reconnaissance group. For this array of forces, supporting units were not listed at all. And, for early and late movements alike, changes were published almost from week to week. On this skeleton foundation the initial pre-shipment plan was set up.

THE PRESHIPMENT PLAN OF MAY 1943

At the urging of the Army Service Forces, the rather sketchy plan of 17 April was revised a month later. This 16 May preshipment plan which was to govern the flow of cargo to the United Kingdom for the next fifteen months, was, in its emphasis, at least, essentially a short-range program, designed to solve immediate problems. From the outset it bore the stamp of improvisation. Yet it represented probably the best possible choice between undesirable alternatives, and stood up remarkably well under the shifting circumstances of the ensuing months.

The most interesting, and the soundest, feature of the plan was the expedient adopted to circumvent the continuing instability of the troop basis. The General Staff had produced a troop list on 14 May, but one little firmer than its predecessor. It consisted of a tentative list of ground and service units expected to arrive in the theatre by the end of the year, phased rather arbitrarily by months; air force units were included only through June 1943. This shaky foundation was the best that could be erected in view of the uncertainty prevailing on the eve of the gathering of the Combined Chiefs of Staff at Washington to discuss the strategic implications of the recently-concluded campaign in Tunisia. There was some doubt whether the cross-Channel operation would even be carried out.

In the face of this uncertainty, the Army Service Forces planners had adopted an expedient which had served us well in the preparations for TORCH: the list of troop units was a "type" list only, and the total quantity of matériel to be shipped in bulk to the United Kingdom would constitute a pool to be drawn upon when needs crystallized. A similar balanced "pool" of equipment for half a million men had filled General Eisenhower's needs the previous summer and fall when fluctuating plans had given the Army Service Forces no firm basis for supply planning. The tentative preshipment troop basis was, in effect, a fiction, and was so considered by the authors of the plan.

This troop list was divided into two parts. Units under orders for April, May, and June were to move under normal procedures; i.e., their equipment (less items of housekeeping and individual equipment) would be withdrawn 30 days before sailing date and shipped to arrive in the theatre simultaneously with or shortly before the troops. For the remainder of the units—July through December—equipment was to be shipped in ad-



Loaded ships await a convoy forming in the harbor.

vance and in bulk, as rapidly as stocks, production, and shipping under existing priorities permitted. "All shipments are made in bulk, not marked for any specific unit [ran a later set of instructions]. In effect, we are trying to supply a balanced stockpile from which you can make issues to meet the needs of such units as may be shipped, as well as current maintenance [replacements]."

It was clearly understood by the authors of the plan that this method would cause unbalanced shipments—a point which aroused some criticism later from theatre operating agencies. This was inevitable, since tables of equipment were bound to change, and since many scarce items could not be supplied until later, because of the low priority of United Kingdom shipments. In such a large total volume, it was hoped that the lack of bal-

ance could be adjusted toward the end of the program.

Like the preliminary plan of April, the directive of 16 May made it clear that pre-shipped bulk cargo was to be drawn from excess stock or production only; training allowances of units in the United States were not to be touched. Thus, advance shipments actually had a priority far lower than even the low one assigned to normal shipments to the United Kingdom. These latter stood almost at the bottom of the priority group for active overseas theatres, which, however, still took precedence over the needs of units in training in the United States. A unit, and its equipment, stepped into this theatre priority group when it moved to the port or staging area for shipment overseas, and shortages in its equipment could, if necessary, be



Bunks are lined four deep in the cocktail lounge of a converted liner.

made up by drawing on lower priority units. But equipment shipped in advance, under the preshipment program, was far down the priority list for the needs of units in various stages of training in the United States. These units received 50 per cent of their allowances of the most important items of equipment upon activation (20 per cent if they were not part of a division), and moved upward in the priority scale by stages as they approached the time of their scheduled shipment overseas. Advance shipments could be made only after all these needs had been filled.

The aims of the preshipment program, then, were rather narrowly limited, and wholly consistent with the subordinate role assigned to BOLERO among the operations of 1943. Its authors had their eyes focused on the surplus of cargo shipping looming up

during the four months of May, June, July, and August. It appeared that by 1 September the surplus of available shipping space over estimated requirements of the troops scheduled to move to the United Kingdom would mount to 784,000 measurement tons. Thereafter, however, shipping would fall short of estimated requirements. By this reckoning, therefore, the immediate problem was to obtain enough extra cargo to fill the surplus space during the summer months—a relatively modest objective in terms of the whole BOLERO program. Preshipment was aimed at this immediate problem, rather than at the long-range troop and cargo objectives. This does not mean that the Army Service Forces or the General Staff were unmindful of the larger implications of BOLERO. But the general uncertainty of strategic plans in

the weeks preceding the TRIDENT Conference discouraged efforts to look beyond the horizon, and, by default, focused attention on more easily visible problems.

THE TRIDENT CONFERENCE AND ITS AFTERMATH

Despite the emphasis placed by both the April and May preshipment directives upon the urgent need for an immediate acceleration of cargo shipments to the United Kingdom, the first results were not encouraging. Several sizable advance shipments were made under the 17 April order—assorted organizational equipment, motor vehicles, engineer construction equipment, packaged gasoline, prefabricated barracks, building materials, and air force technical vehicles, crated and deck-loaded aircraft—but the total for April still fell short of the available cargo space by some 100,000 ship tons, roughly the equivalent of ten ships, which had to be returned by the War Department to the War Shipping Administration. Only 134,950 measurement tons were shipped in April. Available shipping had been given as about 1,050,000 tons for May and June, but only about 800,000 tons of cargo were actually shipped. Nor did the following months (to look ahead for a moment) see any improvement. July shipments totaled about 780,000 tons; August about 730,000. These failed by many thousands of tons to fill the 1,012,000 tons of space available in July or the 1,122,000 tons in August. About 39 per cent of the total shipments in May, June, July, and August, or something over 900,000 tons, represented advance-shipped matériel—a relatively high proportion, natural in view of the low volume of troop movements.

Some of the circumstances surrounding this discouraging performance will be related presently. But it was apparent that the preshipment program, despite its modest aims, was falling behind from the very outset.

Cargo space was not being fully utilized, nor was full advantage being taken of the long daylight hours when cargo could be unloaded in English ports in relative security from air attack.

It had been hoped that the decisions of the TRIDENT Conference in Washington in the latter part of May would solve many of the problems of BOLERO by ending the uncertainty which was hampering long-range logistical planning. In retrospect, the importance of TRIDENT appears undeniable, for the decisions made there did, as the former Chief of Staff has pointed out,⁴ set the basic pattern for the subsequent evolution of the war. The cross-Channel project (now called OVERLORD) was reaffirmed with a target date of spring 1944; Mediterranean strategy was to aim at exploiting the North African successes to the extent of driving Italy out of the war, but without committing Allied resources too deeply. In fact, seven veteran American and British divisions were to be withdrawn from the Mediterranean, following the post-HUSKY operation, to augment the forces concentrating for the invasion in the British Isles. At TRIDENT, too, the cargo-shipping requirements of BOLERO were discussed, and tentative shipment schedules were drawn up.

But despite their long-range validity, most of the TRIDENT plans showed a tendency, in the months immediately following, to change their complexion with variations in the strategic climate. Indeed, the all-important decision regarding the division of effort between Mediterranean operations and BOLERO was cast into doubt almost immediately after the conference. During the discussions at Algiers between General Eisenhower, the Prime Minister, Field Marshal Brooke, and General Marshall in the last days of May, Mr. Churchill indicated that he desired an expansion of operations in

⁴*Third Biennial Report*, p. 10.



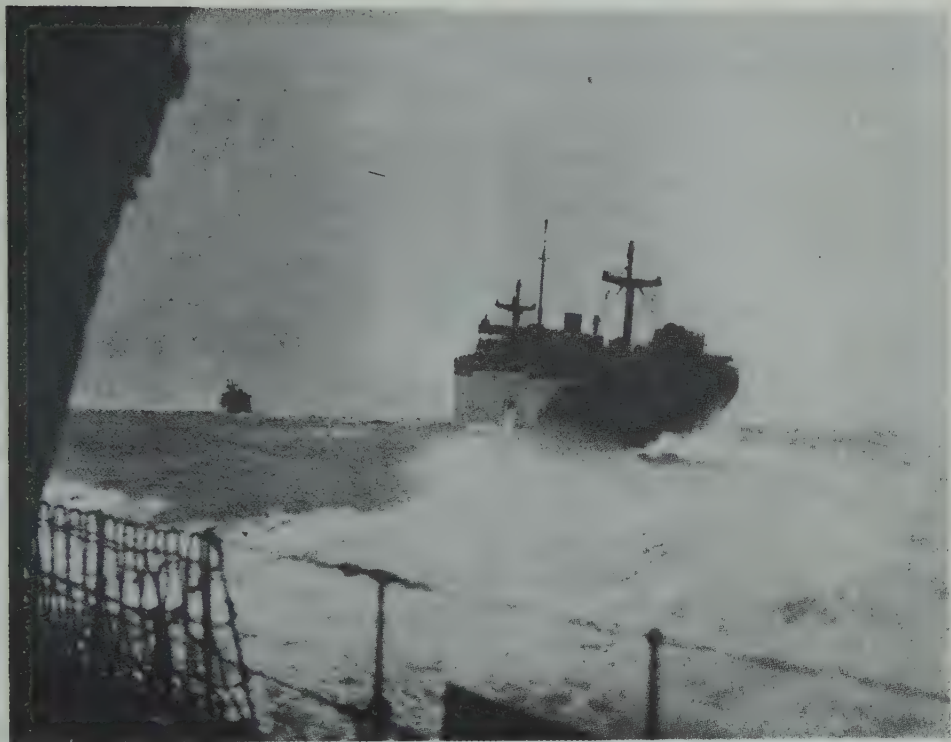
A convoy on the high seas.

the Mediterranean should HUSKY prove successful. This, to be sure, was not precluded by the decisions reached at TRIDENT, but there appeared to be no common understanding on the vital question of how far the expansion should go.

Moreover, even if Italy should collapse, there remained the danger that Germany might abandon her Russian offensive and concentrate large forces in Italy, or possibly Spain. In this event the Mediterranean would probably absorb Allied shipping resources to the exclusion of the ground force build-up in the United Kingdom. On the other hand, failure in Sicily would call for a reconsideration of the whole BOLERO-

OVERLORD plan, which was predicated upon the feasibility of amphibious tactics.

These were the considerations which caused some high Army Service Forces officials, in mid-June, to question the advisability of continuing the preshipment program. Already, by that time, most of the equipment had been shipped for troops expected to sail before October. Commitment of a large stockpile to a theatre which would not for several months have the troops to use it was one of the risks inherent in the policy of advance shipment; it became doubly a gamble as soon as strategic plans began to waver. By the middle of June, it appeared that continuous heavy shipments to the United Kingdom



Ships of a convoy in heavy weather.

would make it difficult to equip any other effort except by withdrawing equipment from the United Kingdom, with consequent delay, losses of equipment, and duplication of shipping requirements.

Preshipment was not abandoned. But throughout the summer—even after the success of HUSKY demonstrated the effectiveness of our new amphibious techniques, and after the supreme strategy had been reaffirmed at Quebec in August—this uncertainty persisted. As late as October it was a major factor in postponing the raising of the priority for advance shipments, with decisive effects, as we shall see, upon the overall results of the program.

In short, the aftermath of TRIDENT accentuated the contradiction between a long-range strategy which was necessarily at the mercy of developments, and a logistics which could be effectual only in the measure that its objectives remained firm. As a consequence of uncertainty in the strategic picture during the summer and fall of 1943, the logistical plans made at TRIDENT or pursuant to its decisions were equally unstable. At QUADRANT, in August, the conferees had to reaffirm the decisions made the preceding May. The transfer of seven divisions from the Mediterranean to England was thereupon accomplished, but cargo shipments in the fall and winter bore little relation to

the schedules outlined either in May or in August. Circumstances, in fact, shaped the BOLERO program at every turn.

THE PROBLEM OF SERVICE TROOPS

One of the conditions of advance shipment on a large scale was the development of adequate port and depot facilities in the United Kingdom to handle and store the incoming matériel. And the first requisite for port and depot operations was service troops. Army supply officers in England remembered vividly the haphazard warehousing of hundreds of thousands of tons of matériel made necessary during the summer of 1942. Moreover, there was not much time for preparation. Heavy cargo shipments were to begin early in the summer.

There was more to the problem than merely advancing the departure dates of the service units already scheduled. The problem went back to the general troop basis for 1942, under which we had entered the war. The strategic concept upon which this troop basis rested envisaged a single, integrated force shaped to move overseas and operate as one mass, striking rapidly at the enemy's homeland in a single invasion. During 1942, however, we embarked upon far-flung operations using relatively small task forces requiring a higher proportion of service support than previously considered normal for communications, transport, supply. Task force commanders, who at first naturally wanted the highest possible proportion of combat troops, soon clamored for more service troops when they found themselves floundering at the end of long lines of communication.

As a result, the revision of the over-all troop basis in November 1942 sought to correct some of the original shortcomings. Current shipping losses under submarine attack were so severe that it seemed unlikely more than 88 divisions could be transported overseas to all theatres by the end of 1944. Con-

sequently, the General Staff abandoned the notion of a mass army in favor of light, easily transportable units, and much greater emphasis on air power. These units would constitute "a pool from which task forces can be organized to meet varying strategic situations." Equipment would be predominantly light, in order to make maximum use of shipping and to conserve critical materials. The total troop list was reduced from 114 to 100 divisions.

In the matter of service troops, however, the new troop basis did not altogether remedy the deficiency of the old. The case for a higher general proportion of service troops was by no means clear-cut, and there was much justification for the argument of the Army Ground Forces that the old tables of organization, with which we had entered the war, were unduly "fat" in this respect. It was difficult to apply sweeping generalizations to varying needs of global war. There was no single formula for economy of force. A combat commander could employ a large proportion of service troops to free his combat elements, or he could use more combat troops at the expense of service support. It was the latter expedient, however, which produced the spectacle of infantry regiments laboring to unload supplies over beaches hundreds of miles behind some Pacific front. Generally speaking, the Army Ground Forces stood for the doctrine that the over-all proportion of services to combat forces before the November 1942 revision of the troop basis, was grossly excessive, and that further dissipation of manpower to noncombatant functions would be fatal. For practical purposes this view applied primarily to service troops used in fixed installations, line of communications, and the United States, inasmuch as the Ground Forces had already pared down the immediate support of basic tactical units like the infantry and armored



An Atlantic convoy under the protecting wings of the Royal Air Force.

divisions, in both combat and service elements.

To some degree, this view prevailed. In its emphasis on mobility, the new troop basis reduced the number of service units using heavy equipment, along with the heavy combat units, and considerable reliance was placed, for such additional service needs as might arise, upon a reserve pool of unassigned personnel. This latter, as it turned out, was largely absorbed during 1943 by the Army Air Forces, the Women's Army Auxiliary Corps, and the Army Specialized Training Program. In general, the new troop basis was designed to provide "a less elab-

orate system of service support." The consequence was that in the operations of 1943 the problem of service support continued to be acute.

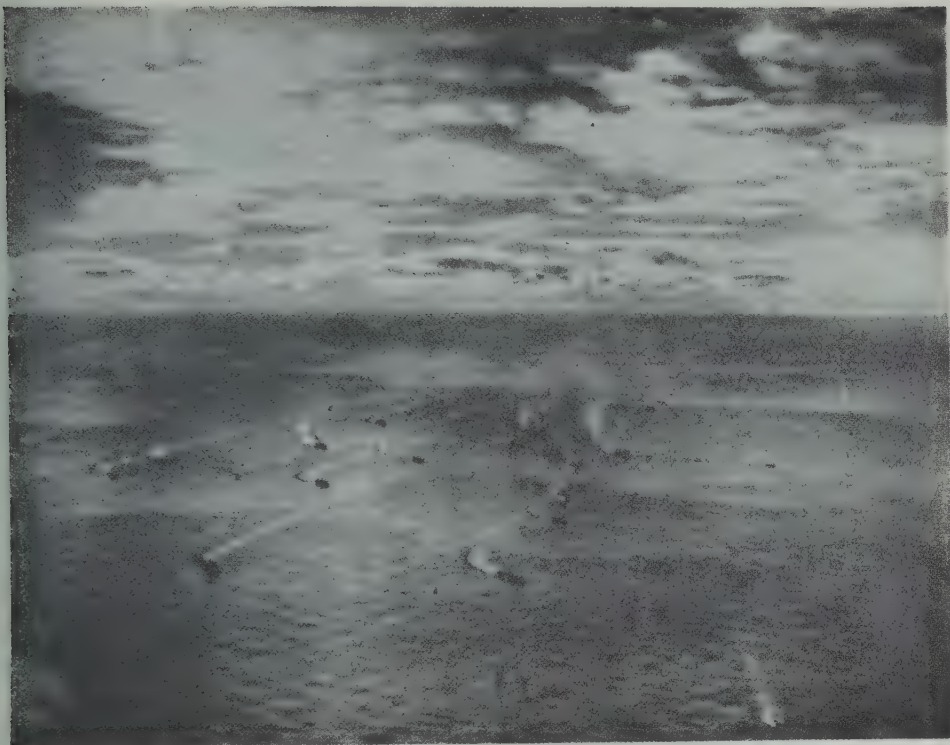
As early as February it was apparent that new service units, beyond the troop basis provision, would have to be activated. In February, March, and April a number of new service units were added: various port operating and supply units, general service regiments, depot companies, railway units of different types, and several truck companies and battalions. These, it can be recognized, corresponded to the three large categories of operations involved in the anticipated influx

of supplies into the United Kingdom during the summer: construction of depots, unloading of ships at the ports, and transport inland. However, the General Staff watched with uneasiness the growing encroachments upon the pool of uncommitted units. For that matter, the Army Service Forces was no less concerned, since it depended on the reserve pool to meet its own future requirements. But at the same time, the Army Service Forces found itself in the uncomfortable position of having to exert pressure on the General Staff for greater service support to meet requirements which had been approved by that same authority.

The movement of service troops to the United Kingdom proceeded at a rising tempo during the spring and early summer. But these scarcely kept pace with the need. An urgent message early in June stated that "construction troops and their supporting truck companies, maintenance companies, etc., are badly needed *now* to take advantage of long days and good weather," and some 33,000 additional service troops were requested for July and August, over and above the existing allocations of combat ground and air forces. In United Kingdom depots and ports, the theatre Services of Supply had already dragooned spare Medical Corps, ground combat and air force troops to work side by side with British civilian laborers and the regular American service units. British manpower had long since been drained off into the armed forces to an extent not approached in the United States, and by August the civilian labor shortage was slowing not only United States Army construction, depot and port operations, but also the assembly of motor vehicles, tire retreading, coal delivery to North Africa, production of locomotive tires, housing, and other activities. In port operations, especially, the labor shortage was perhaps the most important factor in the fluctuating estimates of the capacity of

British ports to receive advance cargo shipments. While the TRIDENT conference had placed this capacity at an average of 150 ships per month, the actual arrivals, as we shall see, did not approach this figure until the spring of 1944. The only means of supplementing British labor was by using American service troops, but the theatre commander encountered here the limitations of available troop shipping. Nor was it possible to substitute service for scheduled combat troops, because the strategic design of which BOLERO was a part contemplated a steady increase in the bombing offensive and, in addition, an early concentration of several divisions to take advantage of any sudden development on the Continent.

Back in the United States, the Army Service Forces was having difficulty enough in obtaining even those service units for which shipping was available. The Navy was sounded out without success as early as May regarding the possibility of lending the Army some of its construction battalions, and the theatre Services of Supply commander advanced the suggestion that engineer general service regiments be supplemented by engineer combat battalions to be used as construction labor. The latter expedient was adopted to a limited degree. At one time it was even contemplated that the entire 29th Division might have to be used as labor. But the most radical expedient, and the one most widely employed, was the diversion of a considerable number of basically trained ground and air force personnel to the Army Service Forces for retraining as service troops. This was the only feasible means of producing sufficient service troops during the summer months, since there were not enough Army Service Forces trainees who had completed their basic training to activate the needed units. In this way all the units could be activated immediately, and would be ready to sail after three months or less of intensive



An Atlantic convoy nearing Great Britain pursues its zigzag course.

unit training.

In the midst of these efforts, during the first week of June, there came news from North Africa that threatened to upset all calculations for the United Kingdom buildup. General Eisenhower indicated that if the impending operation in Sicily were successful, he might need 63,000 additional line of communications troops; some of these could be obtained in the Middle East, but it appeared likely the United States would have to provide at least 30,000, largely at the expense of scheduled troop lifts to the United Kingdom. This was but a foretaste. A month later, on the eve of the Sicilian landings, there were indications that the Com-

bined Chiefs of Staff were reconsidering the entire European strategy, on the assumption that Mediterranean operations might assume such intensity that an indefinite suspension of BOLERO might be necessary. The same possibility had been suggested, it will be recalled, almost immediately after TRIDENT. On 8 July, the Chief of Staff directed that the preshipment program to the United Kingdom be suspended after 15 August until the strategic situation was clarified.

The uncertainty continued into August. While this issue was hanging fire, General Eisenhower followed up his preliminary forecast by a definite request for 68,000 troops in an August convoy, which could only be



A tanker is towed into a British port. Note the deck-loaded aircraft.

provided at the expense of one of the scheduled troop convoys to the United Kingdom. Allowing for some shipments on fast, unescorted troopers, it appeared that of the 103,000 troops originally scheduled for the United Kingdom during that month only 37,000 could be shipped. And since the air forces had first priority, there remained only 15,000 spaces for either ground combat or service units.

The main issue as to over-all strategy was temporarily resolved early in August when the General Staff directed the Army Service Forces to continue with BOLERO as planned, although it had still not been decided to extend preshipment beyond the 1943 United Kingdom troop basis. But General Eisenhower got his convoy in August, and only a trickle of service troops, out of 40,000

originally scheduled, reached the United Kingdom in that month. In the monthly record of troop sailings to the European Theatre of Operations, August sailings alone showed a sharp drop (see Table 2). At the same time, cargo shipments also declined in August, as a result of this and other causes.

The problem of service troops in the BOLERO program did not end in August, of course, and like most other phases of the program, it found no single or total solution. Generally speaking, however, the main objective of preparing the United Kingdom depot system to handle large stocks of matériel was attained, and there was no repetition of the burying of supplies in depots which had occurred during the preceding summer. Part of this achievement was attributable to the steady, unspectacular improvement in tech-

TABLE 2

TROOP AND CARGO FLOW TO THE UNITED KINGDOM, JANUARY 1943-SEPTEMBER 1944

Month	Tons Cargo Preshipped	Percent of Total	Total Tons Cargo Shipped	Total Tons Cargo Arrived	Number Troops Shipped	Number Troops Arrived	Remarks
Jan 1943			129,694	117,913	14,443	13,351	
Feb			92,948	75,566	2,921	1,406	
Mar			115,856	65,767	680	1,277	
Apr			134,950	111,245	3,362	2,078	
May	557,618	35.4	251,832	87,056	40,055	19,220	
June			542,001	348,900	32,848	49,972	
July			779,906	670,024	54,843	53,274	
Aug	355,658	48.7	730,300	753,429	46,085	41,681	
Sep	366,586	40.4	906,981	778,102	76,616	81,116	
Oct	371,602	36.5	1,018,343	956,888	156,377*	105,557	*Includes 66,366 troops on 12 British vessels.
Nov	457,868	54.0	848,054	790,754	67,555	173,860	*Some British troopers used.
Dec	318,314	35.0	910,482	1,008,150	165,301*	133,716	
Jan 1944	263,185	26.8	982,738	886,359	119,015	166,405	
Feb	407,928	34.9	1,170,235	815,948	187,755	136,684	
Mar	335,463	24.5	1,370,183	1,443,248	136,051	124,412	
Apr	465,330	28.4	1,637,690	1,478,651	125,791	216,699	
May	391,723	19.5	2,003,987	1,482,294	130,152	108,463	
June	340,154	18.7	1,815,145	1,609,569	112,016	121,511	
July	285,179	14.9	1,912,878	2,092,771	161,223	152,728	
Aug	452,890	19.3	2,349,189	1,693,784	172,465	152,839	Includes northern France.
Sep	109,073	6.1	1,785,841	1,640,433	184,031	174,245	Includes northern France.
Total	5,478,571	26 1†	21 489,233	18,906 851	1,989 585	2,030,494	

†Percentage of total cargo shipped from May 1943 through September 1944.

niques and procedures: loading, storing, marking, documentation of shipments, and stock control—in all of which enormous strides had been taken since the summer of 1942. On the other hand, it proved impossible to bring sufficient service troops into the United Kingdom to expand port capacity to the limits of available shipping. Toward the end of the BOLERO program, as we shall see, port capacity became the decisively limiting factor.

THE QUADRANT DECISIONS AND THEIR CONSEQUENCES

By early August the bulk of the equipment for all the troops scheduled to move to the United Kingdom before the end of the year had been shipped. It was time to begin advance shipments for those units scheduled for early 1944. A decision on this matter had been delayed by the uncertainty of the strategic situation during July and early August,

which made it impossible to draw up a detailed list of the troop units for the 1944 United Kingdom troop basis. On 31 July, however, a list of the ground units to be sent during the first four months of 1944 was published. In the first week of August the BOLERO program received the go-ahead signal, and on the 13th the directive for pre-shipment on the extended troop basis (to 1 May 1944) finally appeared. The total force thus planned to be assembled by D-Day was to be built around a nucleus of twenty divisions—13 infantry (including the single division already in the United Kingdom before preshipment began), five armored and two airborne.

At the QUADRANT Conference (Quebec) in mid-August, the Combined Chiefs of Staff reaffirmed the main strategic objectives set at TRIDENT in May. In addition, three secondary decisions had a bearing on the advance shipment program. These were (1) to

limit the number of ships which British ports would handle each month during the fall and winter; (2) to transfer four American and three British divisions from the Mediterranean to England late in the fall; (3) to complete by 31 December the rearming with American equipment of eleven French divisions, a program embarked upon the preceding spring. While these operations were not carried out in chronological sequence, they can be discussed conveniently in that order.

It was primarily the shortage of dock workers and other types of port labor, already described, which led the British to seek at Quebec a reduced schedule of cargo sailings from the United States. This placed a ceiling on port capacity considerably lower than the estimated capability both of the United States Army Transportation Corps and the War Shipping Administration to provide ships, and of the Army Service Forces to find cargo. The monthly sailings were as follows:

TABLE 3

Month	Sailings	Month	Sailings
August 1943	81	February 1944	148
September	90	March	109
October	104	April	108
November	105	May	129
December	125	June	130
January 1944	143		

These quotas served only a general planning purpose. Nevertheless, the averages which can be derived from them are significant. The monthly average, while reaching a peak during the winter months, was well below the figures for the winter and spring used for planning at TRIDENT. On the other hand, for the last three months of 1943, the QUADRANT figures were much higher, reflecting the need to make up for the deficit resulting from the winter reductions and from the lag in shipments during the summer. Quotas for spring 1944 were reduced to allow for outloading activities pre-

ceding the invasion. This situation can be seen at a glance in the following table:⁵

TABLE 4

Quarter	Sailings Quota		Actual Sailings
	TRIDENT	QUADRANT	
3d quarter 1943	259	—	241
4th quarter 1943	280	334	273
1st quarter 1944	420	400	347
2d quarter 1944	400	367	568

The figures showing actual performance during the last three of the four quarters listed look ahead of our story, and will be referred to later. It will be sufficient to point out here that the crucial period of the advance shipment program, under the QUADRANT plan, was the last three months of 1943. Despite the inauspicious beginning during the summer months, the planners at Quebec pinned their hopes on a substantial increase in cargo shipments during the final quarter of 1943.

The post-HUSKY redeployment of four American divisions from the Mediterranean had been tentatively planned at TRIDENT, and this decision was merely reaffirmed at QUADRANT. The chief advantage in this move was that shipping already in the Mediterranean and released after the capitulation of Italy could be used to transport the troops directly to the United Kingdom, thus avoiding sending empty troops across the Atlantic. Three of the four divisions (two infantry and one armored) had been included on the preshipment list published in May, phased for shipment in November and December. The remaining division (airborne)

⁵All these figures, including those in the preceding table, are highly uncertain, since they have been compiled from conflicting sources, and in many cases represent only the hypothetical number of ships of 10,000 measurement tons which would account for the tonnages shipped. Part of the difficulty lies in drawing the line between shipments at the end of one month and at the beginning of the next. The division into monthly shipments is highly artificial; a more realistic approach would consider individual convoys.



Bunks up and equipment stacked, troops await disembarkation orders in a ship which has just reached harbor in England.

was not included, since it was to carry its own equipment to the United Kingdom.⁶

⁷ Following the QUADRANT decision, the movement of the four American divisions from the Mediterranean was scheduled for two convoys during late October and the first half of November. They included the 1st and 9th Infantry,⁷ the 2d Armored, and the 82nd Airborne, besides a considerable number of supporting combat and service units. Many of the latter were held back until later

⁶Only one airborne division was listed on the May troop basis, and it (the 101st) sailed from the United States late in August. The redeployment plan also included movement of one infantry division (the 5th) from Iceland to the United Kingdom. Its equipment was preshipped from the United States and it sailed in August.

⁷At the request of the North African theatre commander, the 9th was substituted for the 45th, which had been scheduled originally.

in the year and early in 1944, being needed for the shift of base services to Italy following that country's capitulation. An unexpected difficulty arose when the North African theatre commander, a month after QUADRANT, requested two more divisions to offset partially the loss of those transferred. This movement complicated the redeployment and the whole shipping problem, since a large proportion of the equipment had to be supplied from this country, and the troops used shipping which could ill be spared. In fact, many of these troops sailed during November and December on cargo ships.

These troop movements had their effect on the flow of troops and supplies to the United Kingdom from this country. In the latter part of November one of the regular United

States to United Kingdom troop convoys was diverted to the Mediterranean for the redeployment movement. As a result, November troop movements from the United States to the United Kingdom showed a sharp reduction from previous months—67,555 as compared with 156,377 in October and 76,616 in September. This presented the Army Service Forces with the old problem of finding additional cargo to fill shipping space which had been allocated for the equipment of the outgoing troops. The consequence can be read in the record of cargo tonnages during this period. Through August, September, and October, tonnages rose steadily: from 730,000 to 906,981 and 1,018,343, respectively (see Table 2). But in November the figure fell to 848,054. Significantly, however, *pre-shipped* cargo showed an increase in November—457,868 tons as against 371,602 tons in October and 366,586 in September—reflecting the strenuous effort of the Army Service Forces to exploit depot stocks and production resources.

Rearming of eleven French divisions in North Africa had proceeded at a snail's pace from Casablanca until July. Neither Casablanca nor TRIDENT produced an explicit or detailed plan, and by the end of June only a little more than three out of the eleven divisions had been equipped. In July, however, at the personal solicitation of General Giraud, General Marshall committed the War Department to raising this total to six by the end of August. Fulfillment of the remainder of the program was threatened for a time, along with other plans, by the prospects, in July and August, of a maximum concentration of effort in the Mediterranean. This apparent paradox is explained by the fact that, under the tentative plan agreed on at TRIDENT, the French were to receive the equipment left behind by three of the redeployed American divisions. There were high staff officers in the General Staff and the

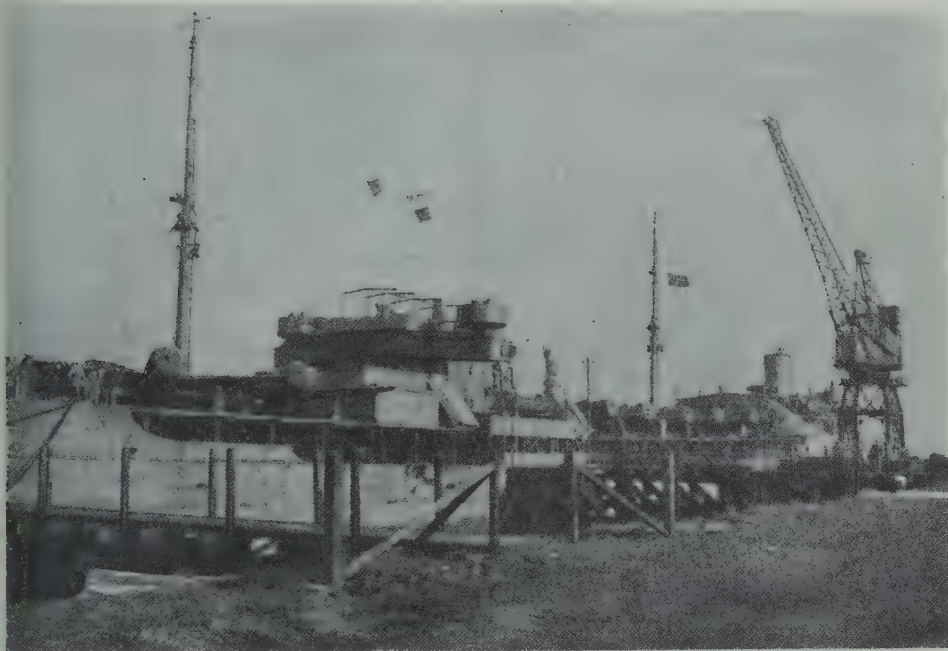
Army Service Forces who, as early as the end of June, believed these divisions would be retained in the Mediterranean, in which case there would be no further equipment for the French.

QUADRANT cleared the air for the time. It was decided that the remaining five French divisions were to be equipped by the end of the year, in part with the equipment of the transferred American divisions. In mid-October, however, the whole question of French participation in the war and occupation of liberated territories was reconsidered at the highest levels. The details of this issue need not concern us here. But the immediate result was that the theatre commander was directed to reexamine the qualifications of the French units and their manpower sources for integration into a large invasion force. Pending a decision, there was to be no further action to complete the rearmament program. This question was not resolved until the following February, by which time the bulk of the equipment had been shipped.

In our present discussion, the French Rearmament Program should be regarded as one of the numerous logistical problems affecting the execution of the BOLERO plan. In terms of tonnages the chief effect was felt in August, when the heaviest shipments—about 250,000 tons—were made to the French. These were only a part, however, of the heavy flow of matériel diverted into the Mediterranean during that month, to the serious detriment of United Kingdom shipments. September shipments to the French were about 150,000 tons, and thereafter, for the remainder of the year, tonnages were inconsequential.

BOLERO RECEIVES TOP PRIORITY

All these difficulties encountered by the BOLERO program resulted in a cumulative lag in cargo shipments to the United Kingdom which by December had reached for-



Deck-loaded aircraft on a tanker awaiting unloading in a British port.

midable proportions. One way of measuring the deficit is to compare the rate of flow of supplies during the seven months of the program before December with that of the following five months up to May (in measurement tons):

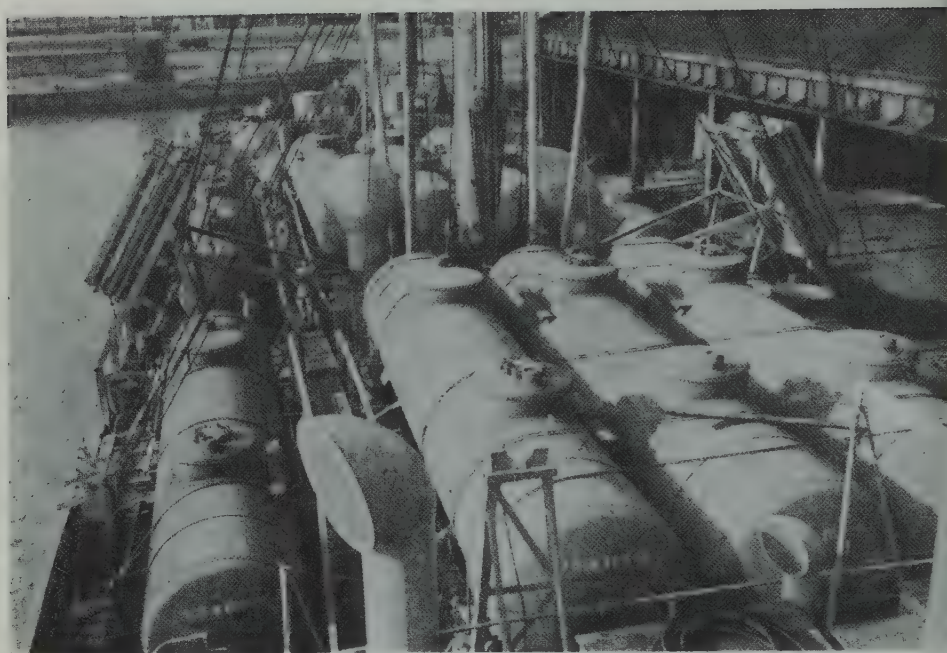
TABLE 5

	May-Nov 43	Dec 43-Apr 44
Total shipments	5,077,417	6,071,328
Monthly rate	725,000	1,214,266

After making due allowance for the fact that BOLERO was planned as a rising curve in volume of shipments, it remains apparent from these figures that the lag in tonnage during the first seven months made necessary a tremendous acceleration in order to com-

plete the program by the target date.

After October, too, the flow of troops began to catch up with the flow of cargo. In October began the heavy troop movements which advance shipments had been designed to anticipate. November saw a sharp decrease in movements from the United States, but transfers from the Mediterranean and the late-sailing October units from the United States brought arrivals in the United Kingdom to a record high of 173,860. December movements were on a comparable scale. To all these troops the advance-shipped equipment and supplies lying ready in United Kingdom depots were issued as rapidly as possible. On 1 November an estimated 1,040,000 tons of preshipped equipment were ready for issue in the United



Deck-loaded tank cars ready to be unloaded in a British port.

Kingdom; two months later, despite the continued flow of supplies, these stocks had dwindled to less than half—445,000 tons.

Not only did incoming troops absorb the depot stocks shipped in advance. The swelling stream of troops tended progressively to reduce the proportion of preshipped cargo in each month's shipments, especially toward the end of each phase of the preshipment program. This can be illustrated by comparing again the two periods (in measurement tons):

TABLE 6

	May-Nov 43	Dec 43-Apr 44
Total shipments	5,077,417	6,071,328
Preshipments	2,109,332 or 41.5%	1,790,220 or 29.5%

The chief cause of the lag in shipments was, of course, the lack of priorities high enough to compete with the demands of other theatres. It was the low theatre priority assigned to normal shipments to the European theatre (A-1b-8, or eighth in the theatre list), together with the far lower priority of advance shipments, which produced the striking artificial phenomenon of a surplus of cargo shipping for supply of the United Kingdom. Actually, of course, it was surplus only with relation to the amount of cargo which could be released to utilize it, but it contrasted glaringly with the shipping shortage under which most other theatres labored. Moreover, it testified to an unbalance in the logistics of the BOLERO plan, for it seemed to indicate that shipping had been allocated virtually without reference to

the anticipated availability of cargo. The predominant characteristic of the shipping schedule was the steady increase in each succeeding months' allocation (see Table 7). Yet, during the first seven months of the program the Army Service Forces had to fill these mounting quotas of cargo under a static system of priorities, which constricted the flow of matériel to the United Kingdom

more tightly with each passing month. This growing pressure was only partially alleviated by increasing production.

At the outset of the program the issue had centered mainly upon the priority for advance shipments. The troop build-up in the United Kingdom had scarcely begun, and active theatres like the Mediterranean required a higher priority for regular shipments. In

TABLE 7
PLANNING FIGURES FOR ARMY CARGO SHIPPING ALLOCATIONS TO UNITED KINGDOM
(in Thousands of Measurement Tons)

Shipments	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June
<i>Actual:</i>	730	907	1,018	848	910	983	1,170	1,370	1,638	2,004	1,815
<i>Allocations:</i>											
3 Aug	960	1,200									
7 Aug	810	1,080	1,270								
14 Aug	810	920	1,200	690							
21 Aug	930	1,060	1,090	1,320							
28 Aug	930	930	1,060	1,090							
4 Sept		930	1,060	1,090							
11 Sept		1,070	1,060	1,090	1,290						
18 Sept		1,070	1,060		1,290						
25 Sept		920	1,060								
2 Oct			1,060	1,090							
9 Oct			1,060	1,090							
10 Oct			1,060	1,090							
23 Oct			1,060	1,090							
30 Oct				1,199	1,419						
6 Nov				1,199	1,419						
13 Nov				1,199	1,319						
20 Nov				830	1,290	1,470					
27 Nov					1,040	1,450					
1 Dec					1,040	1,470					
7 Dec					1,040	1,470					
11 Dec					954	913					
20 Dec					1,040	1,470	1,600				
10 Jan						1,000	1,200				
17 Jan						1,000	1,200				
22 Jan						1,000	1,320				
31 Jan						1,000	1,200	1,200			
7 Feb							1,200	1,200			
10 Feb								1,200			
12 Feb							1,200	1,200			
25 Feb							1,153	1,299	1,375		
3 Mar								1,072	1,220		
11 Mar								1,096	1,220		
5 Apr									1,389	1,454	
13 Apr									1,352	1,460	
3 May											1,447
17 May										1,370*	1,688*
31 May											1,751
7 June											1,737

*After this date, figures include commodity-loaders destined for Continental discharge.

May and again in June, the Army Service Forces had raised the question of limiting troops in training to their prescribed allowances of 50 per cent for divisional and 20 per cent for nondivisional units until they were alerted for oversea movement, rather than permitting them to increase these allowances during their training period as new equipment became available—a point on which the preshipment directive was ambiguous. The issue was clarified when the Army Service Forces, in mid-June, requested authority to withdraw equipment from units in the United States which had more than their prescribed allowances, for preshipment overseas. For some time the Army Ground Forces had argued that all units should receive their full allowances of equipment within six months of their activation (four months for nondivisional units), and strongly opposed the whole principle of large theatre stockpiles.

With the ensuing discussion we are not here concerned. At any rate, the General Staff settled the issue for the time being late in July by disapproving the Army Service Forces request to withdraw equipment from units for preshipment, but at the same time rejecting the Army Ground Forces proposal to raise training allowances. The priority for preshipment remained, for practical purposes, unchanged.

Two months later the Army Service Forces raised the priority issue again, this time supported by the theatre. Late in September the Stock Control Division of the Army Service Forces informed the General Staff that under the current priority it would be impossible to release all the scheduled equipment in time to reach the theatre by D-Day. If all available shipping were to be utilized, a higher priority would have to be assigned to advance shipments by 1 November. From the theatre about the same time came a request for an immediate raising of priorities

in order to fill October quotas. Partly as a consequence of the persistent belief in some high quarters that the main Allied effort would soon be shifted to the Mediterranean, partly because of reluctance to jeopardize the training of units in the United States, no action was taken at this time. Meanwhile, cargo shipments in September and October still failed to fill all available shipping space.

By 1 November it was apparent that shipping for that month also would not be filled. In addition, further cargo requirements had been added to the 1943 troop basis by the advancing of most January troop movements to December. Within the Army Service Forces, Stock Control Division now felt that it would be necessary to assign a single priority (A-1b-8) to both advance and normal cargo shipments to the United Kingdom, with still higher priorities for certain items. At this time, significantly, was heard the first proposal within the Army Service Forces to cut back the schedule of shipping far enough to bring cargo space within the reach of available and obtainable cargo. This affords the best indication of the urgency of the situation, for up to this time all Army Service Forces supply agencies had persisted doggedly in the apparently hopeless struggle to fill the growing volume of cargo space, without, so far as available evidence shows, any suggestion by a responsible Army Service Forces officer that the sights be lowered.

This counsel of despair was rejected, however. On 6 November, without as yet going as far as the proposal of Stock Control Division, the Army Service Forces formally requested the General Staff to assign a priority of A-2b to advance shipments for the United Kingdom; this was the priority for units 60 days prior to oversea movement, which units were now to be moved up to the regular theatre priorities for the United Kingdom (A-1b-8 for ground, A-1b-4 for air units). The measure was substantially approved by

the General Staff on the 10th.

Unfortunately, the situation had already developed to a point where a higher priority for advance shipments alone was of little help. True, preshipment now took precedence over the needs of troops in training. But by the time the new priorities went into effect, on 22 November, it was evident that November quotas would not be met. While advance-shipped tonnages in that month were sizable, the total amount—848,054 tons—was not impressive. By 1 December the flow of troops from the United States had swelled to such a volume (despite a temporary diminution in November), that it was no longer possible to preship large depot stocks. After this date the bulk of the cargo shipped to the United Kingdom would be rapidly absorbed by arriving units, and the flow of matériel could do little more than maintain depot stocks as established levels. The question now was whether the existing theatre priorities would maintain a flow of cargo sufficient to support the scheduled flow of troops.

By December, as we saw at the beginning of this section, the question had become almost rhetorical. Moreover, D-Day was only five months away (according to existing plans). At the SEXTANT Conference (Cairo) in November, and at Teheran in December, OVERLORD had been reaffirmed and detailed plans agreed upon which placed BOLERO-OVERLORD beyond question. With some critical items of equipment still lacking for the 1943 troop basis as late as mid-December—one of the six infantry divisions had only 50 per cent of its signal equipment, and only two had over 90 per cent—it appeared more than ever imperative to raise BOLERO to a top priority.

On 9-10 December Army Service Forces representatives urged the General Staff to raise the theatre priority of the European Theatre of Operations to A-1b-1 for the air

forces and A-1b-2 for the ground forces. At the same time it was suggested that, in view of the 45-day lag between arrival of a shipment and its distribution in the theatre, advance shipments should receive the same priority as regular shipments. In other words, all major categories of matériel for ground forces in the United Kingdom would move under a single priority.

This plan, in substance, received the sanction of the General Staff a week later, and the formal directive appeared on 21 December.⁸ In one sense, the merging of the two priorities signalized the end of preshipment as a separate phase of the BOLERO program. For the four or five months remaining before D-Day the European Theatre of Operations was to have top priority for all needed items of equipment, which were to be shipped whenever cargo space became available. Phasing of shipments went by the board, and all planning was aimed at filling the allotted cargo space. The new directive explicitly included under the one priority (a) shortages of controlled items for units already in the theatre, (b) preshipped supplies for the 1 May 1944 troop basis, and (c) special operational project supplies for the entire period up to three months after D-Day. Each of these categories had previously been assigned a separate priority. Advance shipments continued, but except in the case of those inaugurated early in March for the post-D-Day troop basis, and the operational project shipments, the term "advance" now meant little. For practical purposes, the flow of troops and the flow of cargo were now parallel and balanced.

COMPLETION OF THE BOLERO PROGRAM

During the first week in January, the Army Service Forces presented to the General Staff a comprehensive review of the status of

⁸The North African theatre (ground forces) was moved down to A-1b-3.

BOLERO and a forecast of the stage of completion which could be expected on 1 March and 1 May 1944. The survey was based on the new troop basis published on 14 December, which listed a total of 19 divisions (a reduction from the previous troop basis), including the one already in the theatre at the start of the program; eight of the divisions were yet to arrive in the theatre. The results of the survey were shown by principal categories of supplies, in terms of the hypothetical number of divisions completely equipped:

TABLE 8

Category of Supplies	Number of Divisions Completely Equipped		
	1 Jan	1 Mar	1 May
Chemical Warfare	9	14	18
Engineer	12	16	18
Quartermaster	18	18	18
Medical	10	16	18
Transportation	11	18	18
Ordnance	9	14	18
Signal	5	10	18

The most striking fact brought out was the extreme unbalance of the aggregate quantity shipped during the first eight months of the program. The Quartermaster Corps, for example, had virtually completed its shipments for all 18 divisions by 1 January, while the Signal Corps, by contrast, had equipped only five. Signal equipment represented a relatively small volume, but many of its items were in critically short supply. The problem of equipping five divisions before March and eight more before May with signal items emphasizes the inadequacy of an approach to the BOLERO program which considers only total quantities of supplies, without reference to the different types. Unfortunately, that problem is one of many which we cannot pause to examine here.

Another problem was suggested by these figures. As the end of the program drew near, shipments could be expected to consist

more and more of the relatively scarce items, of varying bulk, which made for wasteful loading. This effect had been forestalled the preceding August by the first extension of the preshipment program, thus making available for immediate shipment quantities of plentiful items of relatively uniform shape and bulk (such as quartermaster supplies) which could be economically loaded. This factor came again into play as shipments under Phase II neared completion.

Top priority solved the most pressing problem of the BOLERO program. Its effect, however, was not felt immediately. For December shipments, of course, the new priorities went into operation too late to bring a marked increase in tonnage. An original allocation of about 142 ships for December had been whittled down steadily (see Table 7), until toward the end of December it stood at 104, theoretically the equivalent of 1,040,000 measurement tons of cargo space. Even so, the month's shipments reached only 910,482 tons. Similarly, January ship allocations fell from 147 to 100 (about 1,000,000 measurement tons) by early in the month, and total shipments reached only 982,738 tons.

It was not until February, in fact, that the flood tide of cargo released by high priorities began. Shipments in that month reached 1,170,235 tons, of which 407,928 tons were advance-shipped. Moreover, at the beginning of March the preshipment program was formally extended to cover the troop basis for May, June, and July (adding four more divisions), thus assuring a continued heavy flow of matériel. It is time to examine the implications of this new situation.

The central and determining fact in the BOLERO program hitherto had been cumulative shortages of cargo. After January, however, the chief limiting factor in the flow of matériel was port capacity in the United



Oil tank cars are stored by the thousands in British fields, ready for shipment to the Continent after the invasion is launched.

Kingdom. Behind this bottleneck cargo was to pile up at East Coast ports in the United States until by June it reached a million tons.⁹ It will be remembered that monthly shipment quotas set by QUADRANT envisaged a rapidly increasing flow of supplies through February 1944. March and April quotas, on the other hand, were low, to allow for outloading traffic. These months, in short, allowed far less leeway than any earlier months for increased shipments to compensate for accumulated deficits.

By March the gap between final objective and capability had become virtually unbridgeable within the provisions of the original program. Computations of shipping availability against requirements indicated

that the current schedule of sailings, even if all ships were filled, would be 61 ships short by May. Already steps had been taken to increase the March allotment of ships from 109 to 120, and before the end of the month 20 more were added. As a result of these measures, cargo shipped in March reached the unprecedented total of 1,370,183 tons. But the theatre had agreed to these increases over scheduled quotas in March mainly because the postponement of the invasion date to early June had also deferred the expected traffic problems of outloading. In April another solution had to be found.

Manifestly, there was only one way out of the closed circle of logistical limitations which hitherto had shaped the BOLERO program. The opening was found in shipping. It was decided to use ships, not alone

⁹ *ASF Annual Report, Fiscal Year 1944*, p. 16.

to transport, but also to hold the additional cargo required until it could be received, either in United Kingdom ports or later on the Continent.

This possibility had been foreseen some time earlier. Late in January the theatre forwarded to the War Department a plan for storing vessels with specified units of supplies, as requested by the theatre, to be unloaded on the Continent. Deck space on the same vessels would be utilized for cargo to be unloaded in the United Kingdom. The ships would be held in United Kingdom waters until their deck cargo could be unloaded and then reconsigned to the Continent. Loading was planned primarily with a view to ready unloading and immediate use; this method had been known for some time as "prestowage." It offered the advantages of saving four handlings in the United Kingdom, and avoiding congestion of port facilities. On the other hand, prestowed ships would be immobilized for at least 30 days in addition to normal turnaround time.

The prestowage plan went through several variations. As finally put into effect, it comprised 54 ships, loaded with subsistence, landing mat, ordnance supplies, clothing and equipage, and eleven shiploads of ammunition, amounting in all to about half a million measurement tons. Originally, these vessels were to sail in two increments, one early in May and one in June.

In addition to the prestowage plan, crystallized early in March, a variant of the plan was advanced by theatre representatives who visited this country late in March to discuss invasion supply problems. According to this plan, an indeterminate number of ships would be loaded almost solid with a single commodity group or several affiliated types of cargo; examples were rations, vehicles, engineer supplies, ammunition, clothing and equipage, and transportation supplies. Medical, chemical warfare, and signal and air

force supplies were not included. Most of these "commodity-loaded" ships were to be discharged on the Continent at ports designated by the theatre, although a limited number might be unloaded in the United Kingdom before D-Day if facilities were available. Twenty were scheduled initially for each of the months of April, May, and June, but those for April were soon dropped. Commodity loaders were easy and economical to load, unlike prestowed ships; cargo information could be transmitted easily; and the ships could be held in United Kingdom waters on call for a Continental destination, where later they could be used either as floating warehouses or for bulk discharge. Once the cost in immobilized shipping was accepted, commodity loading offered an efficient solution to the problem of limited discharge capacity and backlogs of cargo.

As it turned out, no prestowed or commodity-loaded ships sailed in April. The United Kingdom could provide berths for about 140 sailings, representing at most 1,310,000 measurement tons. Actually, 1,637,690 tons of cargo were shipped in April. In other words, some 35 of these ships waited idly in United Kingdom waters for lack of unloading facilities.

In May the theatre constricted still more tightly the point of inflow. During this month the jammed stocks of war matériel in the British Isles poured from depots and open fields down to the busy ports to be loaded for the cross-Channel voyage. The theatre lowered its discharge ceiling to 120 ships during May and June. Consequently the disparity between nominal allocations and actual sailings grew to gigantic proportions during these months as prestowed ships, commodity-loaders, and regular "mixed loads" were dispatched to United Kingdom waters to await berthing space on the Continents. Sailings in May, June, and July included 54 prestowed ships and 148 commodity-loaders.



Major General Frank S. Ross, Chief of Transportation in the European Theater, observes the laying of tracks from a LST in Cherbourg harbor. The LST is fitted with rails for freight cars.*

May shipments climbed to 2,003,987 tons; June to 1,815,145; July to 1,912,878.

Beyond this point we need not carry the story. After June, of course, the discharge capacity of the United Kingdom was supplemented and eventually supplanted by the beaches and ports on the Continent. The preshipment program continued until the end of August, and commodity loading remained a feature of supply to the European Theatre of Operations until well into 1945. It remains now to hazard an evaluation of the preshipment policy in the BOLERO program.

CONCLUSION

In any large perspective, it must be conceded that the preshipment policy was dictated by the logistical situation which the Army Service Forces faced in the spring of 1943. There is no need to review the elements of this situation, which have been discussed at length at the beginning of this article. It is scarcely too much to say that without large advance shipments, the European invasion could not have been mounted at the time or on the scale that it was. This assertion is supported by the fact that in the winter and spring of 1944 both port capacity in the United Kingdom and shipping resources were strained to the utmost; indeed, the limitations of the former made it necessary to squander shipping to the detriment of other theatres. The depot stocks built up in the United Kingdom by November 1943 alleviated by that much the shipping-cargo problem of April, May, June, and July.

But granting this, there remains the question whether the program measured up to its potentialities. The real aim of preshipment was to ship the largest possible quantity of supplies and equipment to the United Kingdom while shipping was available to carry them. In this effort, the program lagged seriously during the first seven, and to some degree during the first nine months, throwing

an enormous burden upon shipping during the remaining four or five months. As a result, it was necessary to resort to the expedients of prestowage, commodity-loading, and other methods of utilizing cargo shipping as a substitute, at least temporarily, for depot storage. These expedients immobilized shipping for extended periods, aside from the fact that in some instances the loading techniques were wasteful of cargo space. While the absence of a fixed target makes it impossible to determine the exact amount of shipping thus employed over and above what would otherwise have been needed had the preceding summer's goals been met, we can make a rough estimate. The difference between the QUADRANT schedule and the actual number of sailings amounted to about 60 sailings, roughly the equivalent of 600,000 measurement tons, during the last three months of 1943; and about 53 sailings, or 530,000 measurement tons, during the first quarter of 1944. The extent to which this deficit of some 1,100,000 tons was made up during the second quarter appears in the fact that about 568 cargo ships actually sailed to the European Theatre of Operations during this period, as contrasted with about 367 planned at QUADRANT. This would indicate, of course, that the deficit was *more* than made up, to the tune of some 88 sailings, in consequence of increased requirements and extension of the preshipment program.

The deficit, we have seen, was caused by the channeling of matériel into other operations, including training activities in the United States, which until the end of 1943 had a higher priority than preshipment to the United Kingdom. Whether the overall strategic plan would have permitted the earlier assignment of a high theatre priority can scarcely be determined from the evidence at hand. It was not until November 1943 that top Army Service Forces officials them-

selves became convinced that it was time to place all our resources at the disposal of BOLERO. Before that time the future of operations in the Mediterranean was clouded, with many pressures working for a reorientation of our chief military effort toward that theatre. Over this situation hung the larger question of the rival claims of Pacific and European strategy, which was debated as late as August at the QUADRANT conference. And even though the issue of our major strategy was decided in the minds of our highest responsible officials, it was natural that they should insist on deferring to the latest safe date a total concentration on the European invasion. At any rate, a final judgment on this matter could be made only after exhaustive examination of all the strategic-logistical factors on a global scale.

As for the subsidiary priority of preshipment, it is significant that the Stock Control Division, Army Service Forces, which submitted a plan in the spring of 1944 for extending preshipment to a later period, proposed a *sliding scale* of priorities starting with A-3a-1 and moving up to A-1b-2 90 days in advance of scheduled troop movements, with provision for further adjustment to suit circumstances. This suggestion clearly aimed at avoiding one defect in the 1943 preship-

ment plan, namely the inherent contradiction between an increasing flow of shipments and a static system of priorities.

Finally, in this whole episode we have a superb illustration of the role of logistics in modern war. It is a curiously dual role. On the one hand, the material factors with which logistics deals—time, space, matter—are ultimately absolute, and rigidly circumscribe the universe within which strategy can operate. On the other hand, the very fidelity with which our original strategic concept in this war, itself essentially a pre-war creation, was followed to its planned conclusion, testifies to the viability of long-range planning based upon elaborate calculations of material factors—which is the essence of logistical planning. In this sense, logistics remains the handmaiden of strategy, which determines its objectives. Ironically, the perfection of logistical planning, in accurately calculating material limitations, leads logically to almost complete subordination to strategy. This subordination is strikingly exemplified in the present study, by the manner in which the execution of logistical plans wavered under the mere threat of a change in the strategic plan. In the last analysis, since the means which strategy dictates are themselves ends, logistics becomes the science of means.

THE DEVELOPMENT OF THE OFFICE OF THE CHIEF OF NAVAL OPERATIONS

BY HENRY P. BEERS

PART I

For more than a hundred years after the creation of the Navy Department there was no provision for the effective direction of the military affairs of the Navy. Congress established bureaus to administer the civil affairs of the Navy—building, equipping, manning, and maintaining the ships of the Navy—but it provided no agency in the Navy Department for the preparation of plans and the direction of these ships in time of war. When wars came, plans for the use of the ships and means for the execution of these plans had to be improvised. During the course of years, however, there gradually developed in the Navy Department some of the elements of a naval general staff, which eventually were to be included in the Office of the Chief of Naval Operations.

The duties of a naval general staff have been described by one of its chief advocates as follows:

Its duties, as generally understood, are to gather information concerning foreign navies or armies, and to measure and correctly appreciate their military value; to consider the probable aims and purposes of these foreign services in case of war; to gain a knowledge of their strong places and of the strategic centers they are likely to occupy at the opening of hostilities; the relation of their force and its strategic center of action to our territory and force in its probable area of action; finally, a careful comparison of our own strength with that of other nations.

Based upon the above considerations, plans are made for the various warlike contingencies likely to occur. These plans are based, primarily, upon strategic and tactical principles, and later, worked out with a detail that grows more minute as in-

formation increases and deliberations mature. These plans which, in the Navy, concern themselves at first with our regular force of battleships and auxiliaries, will gradually include Navy Militia and Reserves, merchant vessels, the naval defense of anchorages unprotected by the army, the provision of additional men for emergencies, and finally, after frequent consultations with the army chiefs, they will provide for that exact co-operation of the army and navy so important to success. . . .

The above making of plans is the first element of General Staff work, and is generally, though vaguely, recognized as being its proper duty.

The second element, though rarely recognized in a formal manner, is by far the more important of the two. It is the mental training of officers engaged in this plan-making, and their consequent readiness to confront warlike situations in general. It does not equal the school of actual war, but it is only second to it—and there is no third method.¹

And in another place the same officer states the powers that should be vested in the naval general staff:

Among the powers essential to a General Staff, some of the more important are those of indicating with authority to the Bureaus the supplies for the fleet necessary to its maintenance and efficiency; of deciding the types of ships to be recommended to the Secretary, their speed and armament; the number of reserve guns needed; the number of men and officers needed for the fleet; the amount of coal required to be stored at different points and the choice of those points; the location of future dry-docks. In fact all general question of affecting the fleet's efficiency would be

¹Henry C. Taylor, "Memorandum on General Staff for the U. S. Navy," U. S. Naval Institute, *Proceedings*, XXVI (Sept. 1900), 444-45. See also Dallas D. Irvine, "The Origin of Capital Staffs," *Journal of Modern History*, X (June 1938), 165.

the subject of a General Staff's reports and suggestions to the Secretary of the Navy.²

Upon the establishment of the Federal Government in 1789 naval affairs were placed in charge of the Department of War by the act of August 7, 1789, creating that department, but there was little business to transact until the act of March 27, 1794, provided for the first six vessels for the Navy. Attacks upon American commerce by the Barbary powers resulted in the passage of the foregoing act, and the imminence of a naval war with France brought about the creation of the Navy Department by the act of April 30, 1798. Under this law naval affairs were managed entirely by the Secretary of the Navy with some clerical help until 1815. The act recognized the civil branch alone of naval administration. Officers of the Navy had little part in its administration and in the determination of policy. The overworked Secretary devoted his time to the material concerns of the Navy, while no attention was given to the use that was to be made of the Navy in case of war.

The effects of our naval administrative organization and the inadequacy of our planning were revealed by the events of the War of 1812. Even when war appeared imminent in the spring of that year, no naval strategy had been decided upon. One group in the administration favored laying up the vessels to prevent their capture or destruction by the vastly superior British navy, while another group thought they should be used for the defense of the coast.³ Shortly before the advent of war in June, as the Secretary of the Navy was without professional assistance in the department, he appealed to a

number of prominent officers for advice. They recommended offensive action on the high seas. When Captain John Rogers received news on June 21 of the outbreak of war at New York, where Secretary Hamilton had attempted to concentrate the ships, he put to sea with his squadron. During the first year of the war some successful single-ship action took place with British warships and considerable damage was done to British commerce by naval vessels and privateers, but by 1814 our vessels were mostly swept from the sea or blockaded at home.⁴

BOARD OF NAVY COMMISSIONERS

The experience of the war having shown the need of supplying the Secretary with professional assistance, a Board of Navy Commissioners was authorized by the act approved February 7, 1815.⁵ It was to be composed of three post captains appointed by the President and was to be attached to the office of the Secretary of the Navy to perform the ministerial duties of that office. The control and direction of the naval forces were to remain in the Secretary's hands; thus civilian supremacy was preserved as provided for by the Constitution. This act made no special provision for the military branch of the department.

A controversy took place between the Secretary and the commissioners over a contention of the latter that the Secretary was obliged to communicate to them the destination of a squadron. This amounted to a claim on the part of the commissioners to the

⁴Dudley W. Knox, *A History of the United States Navy* (New York, 1936), p. 82.

⁵Charles O. Paullin, "Naval Administration under the Navy Commissioners, 1815-1842," *U. S. Naval Inst., Proc.*, XXXIII (June 1907), 604-606. Paullin indicates that Secretary Jones felt the need of a professional assistance during the war. Criticism had been made of the department on this score before and during the war because of its lack of preparedness. Cf. D. W. Taylor, "Navy Department Organization—Past, Present and Possible," Oct. 1920, p. 4, Office of the Secretary of the Navy (abbreviated hereafter to O. S. N.), general files. no. 27325-38½ (National Archives).

²Henry C. Taylor, "The Fleet," *U. S. Naval Inst., Proc.*, XXIX (Dec. 1903), 806.

³Harold and Margaret Sprout, *The Rise of American Naval Power, 1776-1918* (Princeton, 1939), p. 77; Henry Adams, *History of the United States of America During the Administration of James Madison* (4 vols., New York, 1930), III, 362 ff.

right to control the movements of the fleet and the personnel of the Navy.⁶ This difficulty was finally resolved through the intervention of the President in favor of the Secretary. It was decided that the commissioners were to handle the civil functions of the department, while the military affairs having to do with personnel, appointments, detailing of officers, movements of vessels, and the discipline of the Navy were to be managed by the Secretary.

Although this distribution of duties was the reverse of what it should have been, the creation of the Board of Navy Commissioners at least introduced technical knowledge into our naval administration. It provided the Secretary with advice on naval matters.

The problem which was first faced by the Federal Government at this time has been stated as follows: "The essence of this problem was how to combine the expert knowledge of the professional naval bureaucracy, the political leadership of the civilian executive, and the representative function and legislative power of Congress."⁷ This has continued to the primary problem of naval administration in this country, and although faced again and again it has never been satisfactorily dealt with.

BUREAU SYSTEM

The institution of the bureau system in 1842 brought about an improvement in the management of the civil affairs of the department, but again the military branch was neglected. The Board of Navy Commissioners had proved to be an unsatisfactory instrument of administration. Because of its collective responsibility, all the commissioners had been obliged to be familiar with all aspects of the business concerns of the department, and were thus constantly overloaded with work. The reorganization of

the department was recommended by Secretary Paulding in 1839 and Secretary Upshur in 1841.⁸ Commodore Charles Stewart, then foremost opponent of the commissioners among the naval officers, proposed the establishment of six bureaus, the first of which was to have charge of the personnel of the Navy and the movements of the fleet.⁹ Congress, however, agreed with the Secretary that for the direction of the military affairs of the Navy no technical or professional knowledge or experience was necessary,¹⁰ and an act was passed creating five bureaus for the administration of the civil affairs.¹¹ These three commissioners were placed in charge of the first three bureaus, and a civilian and a surgeon at the head of the others. The Secretary continued to handle personnel matters and the employment of the fleet. The duties of the bureaus were to be performed under the authority of the Secretary who was empowered to assign such duties to them as he judged expedient and proper. Individual responsibility was established by the creation of these bureaus, but no effective means was provided of coordinating the work of the bureaus—a task which was usually beyond the capacity and experience of the civilian secretaries. Had the Board of Navy Commissioners been retained and attached to the Office of the Secretary to assist him in operating the Navy, a more proper organization would have been effected.

⁸Charles O. Paullin, "Naval Administration, 1842-1861," U. S. Naval Inst., *Proc.*, XXXIII (Dec. 1907), 1438.

⁹William L. Rodgers, "The Relations of the War College to the Navy Department," U. S. Naval Inst., *Proc.*, XXXVIII (Sept. 1912) 840-41.

¹⁰In his annual report for 1839 (Dec. 30) Secretary J. K. Paulding stated that no special knowledge or experience was required for the direction of the fleet as competent advice was always available but that for the creation of the fleet long professional experience was necessary.

¹¹The bureaus established by the act of Aug. 31, 1842, were as follows: Bureau of Navy Yards and Docks; Bureau of Construction, Equipment, and Repairs; Bureau of Provisions and Clothing; Bureau of Ordnance and Hydrography; and the Bureau of Medicine and Surgery.

⁶Paullin, *loc. cit.*, p. 610; D. W. Taylor, *loc. cit.*, p. 5.

⁷Sprout, p. 93.

ASSISTANT SECRETARY OF THE NAVY

At the outbreak of the Civil War the defects in the organization of the Navy Department became apparent and were remedied by adding professional assistants. In March 1861 an Office of Detail was established in the Office of the Secretary to assist in the detailing of officers.¹² At first composed of one officer, it was soon expanded to a board of three officers. The operations of the Navy Department were divided into two branches, one relating to the naval or professional matters, and the other to the civil transactions.¹³ An ex-naval officer, Gustavus V. Fox,¹⁴ was placed in charge of the former, and the chief clerk, William Faxon, became head of the latter. The position of assistant secretary of the Navy was created for Fox, who was appointed to it on August 1, 1861. As a chief of staff or operating division, he directed the conduct of the naval war.¹⁵ In this difficult task he gained a high reputation, and, in view of the lack of preparedness of the department, it was fortunate that so able a man experienced in naval



GUSTAVUS V. FOX

affairs was selected.¹⁶ Secretary Welles concerned himself with general policy, political affairs, and public relations.

Planning for naval operations was also performed by a commission convened in June 1861 under the auspices of the Navy Department, consisting of Capt. Samuel F. Dupont, U.S.N., Comdr. Charles H. Davis, U.S.N., Major John G. Barnard, U.S.A., and Prof. Alexander Bache of the Coast Survey.¹⁷ Serving as a board of strategy, this body prepared a number of plans for operations on the coasts of the South, which formed the basis for the actions that followed. In addition there was a confidential advisory council in the Navy Department composed of the chiefs of the bureaus.¹⁸

¹²Charles O. Paullin, "A Half Century of Naval Administration in America, 1861-1911," U. S. Naval Inst., *Proc.*, XXXVIII (Dec. 1912), 1319; Charles H. Davis, *Life of Charles Henry Davis, Rear Admiral, 1807-1877* (Boston and New York, 1899), p. 116 ff.; D. W. Taylor, *loc. cit.*, p. 13; Mrs. Rebecca Paulding Meade, *Life of Hiram Paulding, Rear Admiral, U. S. N.* (New York, 1910), p. 232 ff. Paulding was head of the office in which were also Capt. Charles H. Davis and Maxwell Woodhull.

¹³Stephen B. Luce, "Naval Administration," U. S. Naval Inst., *Proc.*, XIV (1888), 582-83; David D. Porter, *The Naval History of the Civil War* (New York, 1886), p. 20.

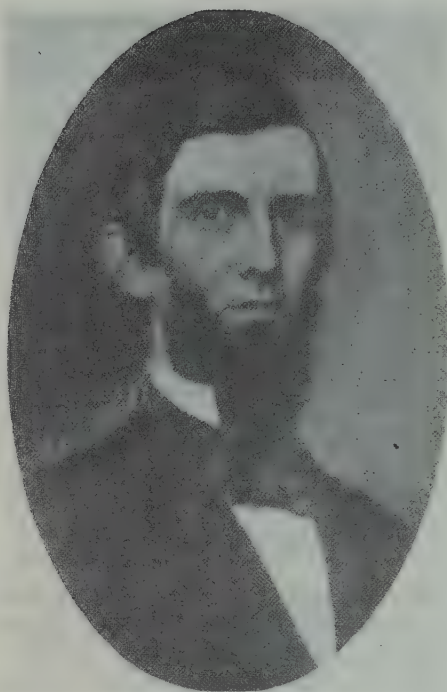
¹⁴A native of Massachusetts, Fox became a midshipman in 1838 and served in the Navy until 1856. After his resignation he became agent of the Bay State Mills at Lawrence, Mass. Upon the recommendation of Montgomery Blair, the husband of Mrs. Fox's sister, Fox was summoned to Washington early in 1861 to advise the government on military matters. He planned an expedition to relieve Fort Sumter which reached there too late. In May he was appointed chief clerk of the Navy Department.

¹⁵Navy Dept., *Annual Report*, 1909, pp. 5-6; Tracy B. Kittredge, *Naval Lessons of the Great War* (New York, 1921), p. 15; Rodgers, *loc. cit.*, p. 842.

¹⁶While aware of an inclination in Fox to be officious, Welles regarded him as an invaluable man of great industry. Cf. *Diary of Gideon Welles, Secretary of the Navy under Lincoln and Johnson* (3 vols., Boston, 1911), II, 233, 241, 418.

¹⁷Navy Dept., *Annual Report*, 1861, p. 6; C. H. Davis, pp. 117, 121 ff.; Paullin, "A Half Century of Naval Administration in America, 1861-1911," U. S. Naval Inst., *Proc.*, XXXIX (March 1913), 190; Rodgers, *loc. cit.*, p. 841.

¹⁸C. H. Davis, pp. 117, 122.



WILLIAM FAXON

EXTENSION OF THE BUREAU SYSTEM

The enlarged operations of the Navy Department resulting from the Civil War led to the extension of the bureau system by the act of July 5, 1862. This act increased the number of bureaus from five to eight. The duties of the former Bureau of Construction, Equipment, and Repairs were distributed among the Bureau of Equipment and Recruiting, the Bureau of Construction and Repair, and the Bureau of Steam Engineering. The former Bureau of Ordnance and Hydrography was divided into the two bureaus of Ordnance and Navigation. While making better provision for the civil branch of the department, this act failed to mention the military branch. It has remained the basis of the bureau system to the present day.

BOARD OF NAVAL OFFICERS

Toward the close of the Civil War and for some years afterward, there was a movement among the line officers of the Navy and in Congress to effect the organization of a board of line officers in the Navy Department to exercise large advisory and directive powers. This board was to occupy a position between the bureaus and the Secretary of the Navy. It was designed to afford professional advice to the Secretary in regard to the building, furnishing, and equipping of the fleet, and to coordinate the work of the bureaus. It was opposed by certain civilians who feared an increased naval influence in the department, by some Secretaries who felt that it would mean rule by a clique of naval officers, by the bureaus, which were likely to become subordinate, and by staff officers who feared domination by the line officers.¹⁹

Measures for the creation of a naval board were before Congress for some years. In 1854 Henry Winter Davis, Congressman from Maryland and severe critic of the administration of the Navy Department, introduced a measure in the House for the establishment of a Board of Naval Administration. Again in February 1865 he proposed an amendment to the annual appropriation bill for a Board of Admiralty.²⁰ This board was to give advice to the Secretary on naval matters, including the organization and discipline of naval forces in time of war. The creation of such a board was favored by Admiral David G. Farragut. During 1867-1869 Senator J. W. Grimes of the Naval Committee had bills before Congress for the organization of a Board of Naval Sur-

¹⁹Paullin, *loc. cit.*, XXXIX, 737-38.

²⁰*Ibid.*; Bernard C. Steiner, *Life of Henry Winter Davis* (Baltimore, 1916), pp. 325-30; *Diary of Gideon Welles*, II, 233, 236-37, 240. Davis and Benjamin Wade, who brought the matter up in the Senate at this time, were prominent among the Radicals who opposed the administration.

vey.²¹ The bill introduced in 1869 was backed by the new Secretary of the Navy, Adolph E. Borie, who was under the influence of Vice-Admiral David D. Porter, who had been placed on special duty in the Navy Department as assistant to Borie by order of President Grant of March 9, 1869. Grimes put the measure through the Senate, but it was defeated in the House because of the inclusion of a provision relating to the rank of staff officers.

Despite the failure of these efforts, further attempts were made in Congress during succeeding years to organize a permanent board of naval officers. B. W. Harris, Congressman from Massachusetts and member of the Naval Affairs Committee, introduced bills in 1878 and 1879 for a Board of Assistants for the Navy. The Secretaries did not favor an organization which would lessen their own powers. Congress, like the Secretary, desired to maintain civilian control in the Navy Department.

The abolishment of the position of Assistant Secretary of the Navy on March 3, 1869, removed a worthwhile official from the Navy Department, and one which years later was restored. Fox had retired from the position on June 1, 1866, and had been succeeded by Faxon who served until the position was discontinued.

A step was taken in 1865 which inaugurated the development in the Bureau of Navigation of some of the duties of a naval general staff. On April 28, 1865, the Office of Detail was placed in charge of the chief of the Bureau of Navigation, which was thereafter known as the Bureau of Navigation and Office of Detail.²²

²¹Paullin, *loc. cit.*, XXXIX, 738, 756; Richard S. West, Jr., *The Second Admiral: A Life of David Dixon Porter, 1813-1891* (New York, 1937), pp. 321-22; *Diary of Gideon Welles*, III, 570; Navy Dept., *Annual Report*, 1869, pp. 24-25.

²²Paullin, *loc. cit.*, XXXVIII, 1319, XXXIX, 736; "The Bureau of Navigation, Office of Detail, and Office of Naval Intelligence," *United Service*, XIII (Dec. 1885), 645.

NAVAL ADVISORY BOARDS

In the years following the Civil War the United States Navy underwent a notable decline. Many of the vast fleet of ships built up during the war were sold, scrapped, or laid up. No attempt was made to keep up the fine technical progress which had been achieved. While European navies forged ahead along new lines, the American Navy returned to the days of the sailing ships. In 1865, 700 ships comprised the Navy; in 1880 there were forty-eight, and not one of these was a first class modern warship. The usual postwar reaction against things military; political and economic developments; and the struggle over reconstruction in the South have been presented as the reasons for the state the Navy reached in 1880.²³

The reconstruction of the Navy dates from 1881. By that year conditions in the country were favorable; the pressure of naval officers who had been urging reform was more manifest; and Congress, which had been accumulating information in investigations of the Navy Department, was dissatisfied and ready to act. The expanding naval strength of Great Britain and her aggressive attitude in Latin America also influenced opinion in the United States.²⁴ There was a growing realization of the impotence of the American Navy at a time when our foreign policy was beginning to need greater support because of international complications in various quarters of the world.

The new administration of President James A. Garfield entered into power, and with it a capable Secretary of the Navy, William H. Hunt of Louisiana. He appointed a Naval Advisory Board on June 29, 1881, to prepare plans for rebuilding the Navy. Consisting of fifteen officers—nine of the line and six of the staff—presided over by Rear Ad-

²³Sprout, pp. 175-77; George T. Davis, *A Navy Second to None: The Development of Modern American Naval Policy* (New York, 1940), p. 12.

²⁴G. T. Davis, pp. 23 ff.

miral John Rodgers, it met from July to November and presented a report recommending the construction of sixty-eight vessels at a cost of over \$29,000,000. Secretary Hunt submitted its report to Congress with a strong recommendation.²⁵ Congress on August 5, 1882, authorized the construction of two steel cruisers but made no specific appropriation. This act also limited the amount of repairs that could be made on wooden ships to 30 per cent of the estimated cost of a new ship of the same size and material. It provided for the appointment of a Naval Advisory Board to advise and assist the Secretary and to supervise construction of the new vessels authorized by that act. Funds were provided by the act of March 3, 1883, for four steel vessels—the unarmored cruisers *Chicago*, *Boston*, and *Atlanta*, and the dispatch boat *Dolphin*.

The Second Naval Advisory Board appointed in the fall of 1882 consisted of five naval members and two civilians headed by Commodore R. W. Shufeldt. It presented reports for additional vessels for the Navy in 1882 and 1883, but Congress made no further appropriation until 1885. Under the Cleveland administration (1885-1889) both the President and the Secretary of the Navy, William C. Whitney, favored naval expansion, and thirty new vessels were authorized. By the end of this period the Second Naval Advisory Board had passed out of existence, being replaced by the Board on Construction. Because of inexperience the advisory board had made some costly blunders.²⁶

The strategic policy determining the choice of classes of vessels to be constructed for the New Navy underwent a change after the early years of the program. The selection of the unarmored cruisers was based upon the traditional American policy of commerce

raiding and passive coast defense.²⁷ This policy was opposed by such naval officers as Alfred T. Mahan, Stephen B. Luce, Daniel Ammen, and Caspar F. Goodrich and by Secretaries of the Navy Benjamin F. Tracy and Hilary A. Herbert.²⁸ By 1890 Mahan's philosophy of the command of the sea or the capital-ship theory prevailed over the earlier concept, and the first battleships, the *Indiana*, *Massachusetts*, and the *Oregon* were authorized.²⁹ This enactment constituted the first step towards the creation of a fighting fleet that could seize command of the open sea.

The renaissance of the Navy had important effects upon naval administration. To construct and administer the New Navy properly, it was necessary to organize a number of new permanent agencies in the department. These new agencies not only assisted in the development of the Navy but also had an important influence on the establishment of still other offices, which added to the elements in the department constituting a naval general staff. Gradually through the years the growth of the Navy forced the improvement of naval administration.

BOARD OF INSPECTION AND SURVEY

Besides the provisions already mentioned, the act of Congress of August 5, 1882, directed the Secretary of the Navy to designate boards of officers to examine all the vessels of the Navy. Vessels not found suitable for service were to be stricken from the *Navy Register* and reported to Congress. Inspections of naval vessels had been required by regulations for many years. The existing practice had been written into the Navy

²⁷*Ibid.*, p. 195.

²⁸G. T. Davis, pp. 90-91; Sprout, pp. 198 ff.

²⁹Sprout, p. 205. Captain Mahan was engaged at this time in writing his first book, *The Influence of Sea Power upon History*, which was published in 1890. The Sprouts believe that Secretary Tracy embodied Mahan's ideas in his annual report of 1889 in which he recommended the construction of two fleets of battleships, twelve ships for the Atlantic and eight for the Pacific.

²⁵Sprout, p. 186; Thomas Hunt, *The Life of William H. Hunt* (Brattleboro, Vt., 1922), p. 222; G. T. Davis, pp. 37 ff.; Paullin, *loc. cit.*, XXXIX, 1470.

²⁶Sprout, p. 192.

regulations of 1857, which required inspections by naval constructors and yard engineers of vessels under construction and by commanding officers upon assuming command.³⁰ A Board of Inspection was organized about 1870 to inspect vessels of the Navy and report upon their condition.³¹ In 1877 a Board of Inspections was formed under Commodore George H. Cooper, which was advisory in character, but it was abolished after the creation of the Board of Inspection and Survey. The latter board was constituted on September 29, 1882, when orders were addressed by Secretary W. E. Chandler to Commodore A. A. Semmes, who was to act as the president of the board.³² It was to be under the supervision of and to report to the Admiral of the Navy, David D. Porter.

Concerning the duties of the Board of Inspection and Survey the Navy regulations of 1900 prescribed as follows:

This Board, under specific orders in each case from the Department, shall be charged with the acceptance examinations and trials of all naval vessels built by private firms, and the inspection of all naval vessels newly commissioned. It shall inspect and examine all naval vessels on their return from foreign stations, and vessels in the United States as often as once in three years when practicable, and, when ordered, shall inspect any vessels in reserve or in ordinary, and shall report to the Secretary of the Navy in writing which of said vessels are unfit for further service.

OFFICE OF NAVAL INTELLIGENCE

In 1869 the Bureau of Navigation was directed by the Secretary of the Navy to

collect information about foreign navies and other naval data. The need for this kind of intelligence became apparent when the process of building the New Navy was begun, for the deficiencies in our naval resources became known. The Office of Intelligence was established in the Bureau of Navigation on March 23, 1882, "for the purpose of collecting and recording such naval information as may be useful to the Department in time of war, as well as in peace."³³ Lt. T. B. M. Mason, who became its first head, was chiefly responsible for its organization.³⁴ In the same year the first naval attaché Lt. Comdr. Franch E. Chadwick, was sent to London. He was followed in 1885 by Lt. Benjamin H. Buckingham, who maintained contact at Paris, St. Petersburg, and Berlin. Lt. Nathan Sargent was the first attaché accredited to Rome and Vienna (1888). Two years before, Comdr. Francis M. Barber had gone to Tokyo and Peking. Not until 1910 was an attaché Comdr. Albert P. Niblack, sent to Buenos Aires, Rio De Janeiro, and Santiago de Chile.

Soon after its organization the Office of Naval Intelligence, as it came to be called, began issuing publications which were continued for many years. Its early efforts were directed toward obtaining data pertaining to ships, armament, organization, and other information useful in the rehabilitation of the Navy. After the New Navy had come into existence the office gave its attention to securing information for the employment of the Navy in war. As indicated by the order effecting its establishment, its duties included war plans. Although it never accomplished much along this line, the creation of this office was the first step taken by the Navy

³⁰Board of Inspection and Survey, "History of the Board of Inspection and Survey" (MS in National Archives), p. 23.

³¹Paullin, *loc. cit.*, XXXIX, 755. Porter stated that the inspections had resulted in an improvement of the fitting of vessels and the remedying of defects (Report of Admiral David D. Porter, Oct. 2, 1871, Navy Dept., *Annual Report*, 1871, p. 34).

³²"Navy Department, Naval Academy, Commanding Officers, and Other Officers," No. 12, pp. 171-72 (Office of Naval Records and Library); Navy Dept., *Annual Report*, 1882, p. 256.

³³Navy Dept. general order no. 292, Mar. 23, 1882, M. S. Thompson, *General Orders and Circulars Issued by the Navy Department from 1863 to 1887* (Washington, 1887), p. 208; Paullin, *loc. cit.*, XXXIX, 1252-53.

³⁴Albert P. Niblack, *The History and Aims of the Office of Naval Intelligence* (Washington, 1920), p. 2.

Department toward the establishment of a naval general staff.³⁵

The office of Naval Intelligence was transferred to the reestablished office of Assistant Secretary of the Navy in 1890. An order of the Secretary of April 26, 1898, returned it to the Bureau of Navigation. The first legislative recognition of this office was in the appropriation act of February 24, 1899, which authorized a number of clerks.

The order creating the Office of Naval Intelligence attached the department library to it in order to facilitate its work. Prof. James R. Soley was appointed librarian, and an appropriation for books was made on August 5, 1882, which enabled an expansion of the library to be undertaken. Besides acting as librarian, Prof. Soley also began collecting and arranging the official records of

the Union and Confederate navies for publication. The first appropriation for this work was made on July 7, 1884, and Soley was made superintendent of the Naval War Records Office, the new division which had charge of this task. This office and the library continued to function under one head.³⁶ They were transferred to the Office of the Secretary of the Navy on October 21, 1889.³⁷

NAVAL WAR COLLEGE

In 1884 the Naval War College was established at Coaster's Harbor Island, Newport, Rhode Island, to provide an advanced course of professional study for naval officers in naval art and science, history, and international law. Credit for this important step is due to Commodore Stephen B. Luce, one of the most progressive officers of his day. After several years of agitation, Luce with the support of his friends, Admiral David D. Porter and Capt. John G. Walker, Chief of the Bureau of Navigation, succeeded in having a board of officers appointed by Secretary William E. Chandler on May 30, 1884.³⁸ Commodore Luce was designated as president of the board. The board made a favorable report, and on October 6, 1884, Chandler issued an order establishing the college under the Bureau of Navigation, designating Luce as president.³⁹ Although the college was opened in that fall, there were no funds for its maintenance; and so the first class did not assemble until September 1885. The practice developed of having naval offi-



PROF. J. R. SOLEY

³⁵Richard Wainwright, "The General Board, a Sketch," *U. S. Naval Inst., Proc.*, XLVIII (Feb. 1922), p. 192.

³⁶Paullin, *loc. cit.*, XXXIX, 1254.

³⁷Lloyd M. Short, *The Development of National Administrative Organization in the United States* (Baltimore, 1923), p. 310.

³⁸Albert Gleaves, *Life and Letters of Rear Admiral Stephen B. Luce, U. S. Navy* (New York, 1925), pp. 168 ff.; Stephen B. Luce, "U. S. Naval War College," *U. S. Naval Inst., Proc.*, XXXVI (June 1910), 562; John Stapler, "The Naval War College, a Brief History," in *ibid.*, LVIII (Aug. 1932), 1157-63.

³⁹Navy Dept. general order no. 325, Thompson, p. 236.



REAR ADM. STEPHEN B. LUCE



U. S. NAVAL WAR COLLEGE, NEWPORT, R. I.

cers, army officers, and university professors give lectures.

The assignment of Captain Alfred Thayer Mahan at the request of Luce to lecture on naval history and tactics had important consequences. Mahan began lecturing at the college in 1886, succeeding Luce as president. Of scholarly bent, Mahan was possessed of remarkable ability in research. His lectures were so favorably received that he prepared them for publication; the result was his famous books on the influence of sea power on history, the first of which appeared in May 1890.⁴⁰ His presentation in this book, *The Influence of Sea Power upon History, 1660-1783*, of the strategic principles of sea power opened the eyes of the admiralties of

the world, including the United States Navy Department, and had a great effect on naval policy.⁴¹

In its early years there was considerable opposition to the Naval War College. Many officers regarded it as unnecessary, as did Commodore Francis M. Ramsay, who succeeded Walker as Chief of the Bureau of Navigation in 1889. The Chief of the Bureau of Equipment and Recruiting was a bitter enemy because the quarters of the Naval Training Station on Coaster's Island had been taken away from it and turned over to the college. The result was the consolidation of the college with the Torpedo Station on neighboring Goat Island in January 1889, which was to be called thereafter the Naval Torpedo Station and War College.⁴² The

⁴⁰W. D. Puleston, *Mahan: The Life and Work of Captain Alfred Thayer Mahan, U. S. N.* (New Haven, 1939), p. 90; Alfred Thayer Mahan, *From Sail to Steam: Recollections of a Naval Life* (New York, 1907), p. 302.

⁴¹Sprout, pp. 202 ff.

⁴²By Navy Dept. general order no. 365, Jan. 11, 1889; Luce, *loc. cit.*, XXXVI, 566-67; *U. S. Statutes at*

college was thereby transferred to the Bureau of Ordnance. A new Secretary of the Navy, Benjamin F. Tracy, recommended that the new building for the college, for which \$100,000 had been appropriated by act of March 2, 1889, be located on Coaster's Harbor Island and that it be transferred to the Bureau of Navigation.⁴³ This removal was effected by an act approved June 30, 1890, and in September 1892 the college opened under Mahan's presidency, after a suspension of two years, in its new building on Coaster's Harbor Island. In the meantime the college had been placed under James R. Soley, the new Assistant Secretary of the Navy and a close friend of Mahan.⁴⁴ From 1894 to 1898 the college formed part of the command of the United States Naval Station, Newport, Rhode Island.⁴⁵ Under a succession of able officer presidents the Naval War College grew in reputation to the point where naval officers requested details to it in order to engage in the study of the art of war. In 1901 the college was returned to the jurisdiction of the Bureau of Navigation.⁴⁶

The faculty and students at the college engaged not merely in the routine lecture courses but also practiced naval tactics and prepared plans. A war game was developed by Capt. William M. Little in 1886 in which paper ships were used in maneuvers on a tactical game board or chart.⁴⁷ War plans

Large, XXV, 459. Mahan was detached and sent with a commission to select a site for a navy yard on Puget Sound. In the summer of 1889 he lectured in a course held at the Torpedo Station. During 1890-91 he gathered material for continuing his historical course through the French Revolution and Empire.

⁴³Navy Dept., *Annual Report*, 1889, p. 36; Puleston, p. 87; Short, p. 311.

⁴⁴Puleston, p. 92; Luce, *loc. cit.*, XXXVI, 570; B. F. Tracy to Soley, May 10, 1892, O. S. N., general files, no. 10568.

⁴⁵Navy Dept. general order no. 421, March 14, 1894; no. 496, August 16, 1898.

⁴⁶Navy Dept. general order no. 74, Dec. 13, 1901; Navy Dept., *Annual Report*, 1902, p. 409.

⁴⁷Puleston, p. 84; W. McCarty Little, "The Strategic Naval War Game or Chart Maneuver," U. S. Naval Inst., *Proc.*, XXXVIII (Dec. 1912), 1212-33.

were drawn up for potential naval campaigns, as at the time of the Venezuelan affair in 1895. The Navy Department now had an organization, the Office of Naval Intelligence, to collect information necessary for waging



ALFRED THAYER MAHAN

war and an institution to utilize that information in making war plans.⁴⁸ At the Naval War College, the officers of the Navy obtained the intellectual training which prepared them for general staff duties. The college became an advocate of the establishment of such an organization.

BUREAU OF NAVIGATION

The rehabilitation of the Navy in the 1880's and the increased activities of the Navy Department resulting therefrom produced recommendations for reform in naval administration. It was now harder to put up with the defects in organization. The

⁴⁸For an example made by an officer of the principles learned at the Naval War College see William S. Sims, "Naval War College Principles and Methods Applied Afloat," in *ibid.*, XLI (Mar.-Apr. 1915), 383-403; and Elting E. Morison, *Admiral Sims and the American Navy* (Boston, 1942), pp. 289 ff.

work of the bureaus was not coordinated, and there was much duplication, particularly in the procurement of supplies and materials. Enlisted personnel was handled by the Bureau of Equipment and Recruiting, and the detailing of officers by the Bureau of Navigation.

The lack of a chief of staff to direct the military affairs of the Navy was pointed out by naval officers in published articles in the *Proceedings of the United States Naval Institute*. Capt. A. P. Cooke, speaking before the institute at Annapolis in October 1886, advocated the organization of a commission by the staff of the Office of Naval Intelligence to manage the Navy under the direction of the Secretary of the Navy.⁴⁹ He stressed the importance of a general staff in preparing for war and in conducting the war when it comes. Commodore Luce incurred the displeasure of the department by his long-continued efforts at reform and especially by his address at Annapolis before the institute in 1888 in which he strongly urged attention to a long list of points, including the creation of a chief of general staff to assist the Secretary of the Navy in the military operations of the department.⁵⁰ He believed that all important matters should be discussed by a council composed of the Secretary and the principal officers of the department.

Recommendations were made by the Secretaries in their annual reports to remedy the situation in the department, but the department itself finally had to act. Secretary William C. Whitney in his first annual report in 1885 declared there was something radically wrong with the organization of the department and proposed a division of its functions into its three natural divisions: Personnel and the Fleet, which would be the

military branch; Material and Construction, which would furnish the ships and their equipment and supplies; and Finance and Accounts. The completion of the first vessels of the New Navy made it desirable to have a better means within the department of operating it. Benjamin F. Tracy, upon becoming Secretary of the Navy in 1889, likewise studied the organization of the department, and, not liking what he found, determined to reorganize it under his authority to distribute the duties of the bureaus.

By general order no. 372 of June 25, 1889, Tracy concentrated in the Bureau of Navigation the supervision of the entire fleet as to vessels, officers, and enlisted men for training, assignment, inspection, and practice.⁵¹ The Office of Detail was absorbed by the bureau at this time.⁵² Orders governing movements of vessels, except those issued by officers afloat or at shore stations, were to be signed by the Secretary and recorded in the bureau.

The Office of Naval Intelligence and the Naval War College were placed under the Assistant Secretary of the Navy in 1890, but these organizations were restored to the Bureau of Navigation in 1898 and 1901, respectively. For some years thereafter this bureau performed some of the functions of a naval general staff in conjunction with the General Board.

BOARD ON CONSTRUCTION

A board of the chiefs of the Bureaus of Yards and Docks, Ordnance, Equipment, Construction and Repair, and Steam Engineering and the Chief Intelligence Officer was created in 1889 to exercise general supervision over the designing, constructing, and equipping of the new ships of the Navy.⁵³

⁴⁹A. P. Cooke, "Naval Organization," *U. S. Naval Inst., Proc.*, XII (1886), 492-94.

⁵⁰Stephen B. Luce, "Naval Administration," in *ibid.*, XIV (1888), 586-87; Gleaves, p. 241.

⁵¹Navy Dept., *Annual Report*, 1889, pp. 37-40, 295.

⁵²Paullin, *loc. cit.*, XXXIX, 1266.

⁵³Navy Dept., *Annual Report*, 1889, p. 39; Wainwright, *loc. cit.*, p. 193; Paullin, *loc. cit.*, XXXIX, 1262.

This board was to effect the coordination in the work of these bureaus which was so badly needed. It passed upon the military characteristics of ships before they were undertaken, and it was held responsible for the performance of the completed ships. Known at first as the Board on the Designs of Ships, it was soon called the Board on Construction. It appears to have performed a useful function for some years.⁵⁴

INFORMAL NAVAL STRATEGY BOARD

An embroilment with Chile arising from an attack upon the crew of the *Baltimore* at Valparaiso on October 16, 1891, and the failure of the governments of the United States and Chile to reach a prompt settlement led to preparations by the Navy Department for war. Captain Mahan was called to Washington to act as a naval adviser, and an informal board, composed of Mahan, Assistant Secretary Soley, and an officer of the Office of Naval Intelligence, began the preparation of plans for a naval campaign against Chile.⁵⁵ Secretary Tracy also consulted Captain Ramsay and Capt. William M. Folger, Chief of the Bureau of Ordnance. By the end of January 1892, after President Harrison had sent a war message to Congress, Chile apologized and agreed to pay an indemnity. The episode provided a further demonstration of the need of adequate planning and preparation for war, but the lesson was not taken to heart.

NAVAL WAR BOARD

The Spanish War arrived and found the department in the same situation. And again a temporary board was organized. It grew

out of an informal defense board which was formed prior to the war, consisting of the commander-in-chief of the North Atlantic Fleet, the chiefs of the Bureaus of Navigation and Ordnance, the president of the Naval War College, and the Chief Intelligence Officer.⁵⁶ Both the Naval War College and the Office of Naval Intelligence presented plans for a war with Spain, and the latter perfected plans which were approved by the board, but they were obsolescent before the opening of the war. Lacking professional experience and having no general staff, Secretary John D. Long appointed the Naval War Board.⁵⁷ This board was in existence in April before the outbreak of war; it consisted at first of Assistant Secretary Theodore Roosevelt, Rear Admiral Montgomery Sicard, Capt. A. S. Barker, Capt. A. S. Crowninshield, Chief of the Bureau of Navigation, and Comdr. Richardson Clover, Chief Intelligence Officer.⁵⁸ Roosevelt, Barker, and Clover left in May to take up other posts. Capt. A. T. Mahan, U.S.N. Retired, reported for duty with the board on May 9; on the following day he recommended to the Secretary of the Navy that the board be abolished and that responsibility for naval strategy be vested in a single officer who should be allowed to select assistants.⁵⁹ He believed that individual responsibility alone

⁵⁶Wainwright, *loc. cit.*, p. 193.

⁵⁷Long, I, 162.

⁵⁸John D. Long, *America of Yesterday, as Reflected in the Journal of John Davis Long*, edited by Lawrence S. Mayo (Boston, 1923), pp. 182 ff.; Navy Dept., *Annual Report*, 1898, II, 33; Jarvis Butler, "The General Board of the Navy," U. S. Naval Inst., *Proc.*, LVI (Aug. 1930), 701.

⁵⁹Puleston, p. 188; Mahan to Long, May 10, 1898, in John D. Long, *Papers of John Davis Long, 1897-1904*, selected and edited by Gardner W. Allen (Massachusetts Historical Society, "Collections," Vol. 78) (Boston, 1939), pp. 119-20. Secretary Long noted in his journal on the day Mahan reported that although he had achieved great distinction as a writer of naval history and had made a very thorough study of naval strategy, it was doubtful if he would be of much value practically.

⁵⁴Navy Dept., *Annual Report*, 1892, p. 48; John D. Long, *The New American Navy* (2 vols., New York, 1903), I, 121.

⁵⁵Gleaves, pp. 324-25; Puleston, p. 114; Paullin, *loc. cit.*, XXXIX, 1502; James F. Rhodes, *History of the United States* (9 vols., New York, 1928), VIII, 374-79.

achieved results in war.⁶⁰ The Secretary knew of no mistakes the board had made, and he continued it.

The board of three men, Sicard, Crowninshield, and Mahan, and a secretary met daily throughout the war, collecting information, advising the Secretary as to strategic policy, and preparing orders to effect this policy for his signature. The board participated in occasional cabinet meetings and military councils at the White House in which questions of strategy were discussed. Naval War College war plans were presented to the board and formed the basis of the operations of Sampson and General Shafter.⁶¹ Mahan was less impractical than the Secretary had expected him to be, for on his advice and that of his colleagues Long made the decisions on which the naval operations were based.⁶² The board was dissolved in the autumn after the conclusion of the war.

GENERAL BOARD

Agitation by naval officers following the Spanish War for a permanent body of professional advisers in the department led to the institution of the General Board. Capt. Henry C. Taylor addressed a memorandum to the Secretary, at his request, in the winter of 1899-1900 describing the duties of a general staff and indicating the need of the Navy for such an organization.⁶³ Secretary Long recognized the need for a general staff,

⁶⁰Mahan remained of this opinion. See his *Naval Administration and Warfare* (Boston, 1908), p. 65.

⁶¹Kittredge, p. 20.

⁶²Puleston, p. 201. Rear Admiral Luce wrote of the board in May 1898 "What do we find in place of a General Staff? An irresponsible board of hastily caught up officers, each one excellent in his own particular sphere but each varying from the others in previous mental training and habits of thought, a mere make-shift called into temporary being by the emergencies of war." Cf. Gleaves, p. 235.

⁶³Henry C. Taylor, "Memorandum on a General Staff for the U. S. Navy," U. S. Naval Inst., *Proc.*, XXVI (Sept. 1890), 441-48. Chief credit is given to Taylor for the establishment of the General Board. Cf. Wainwright, *loc. cit.*, p. 191; Luce, "Naval War College," *loc. cit.*, p. 581; Butler, *loc. cit.*, p. 702; D. W.

but believed that the Navy was not ready for a complete organization and that he could go no further than to institute the General Board.⁶⁴ The proposal for a naval general staff was bitterly opposed by Senator Eugene Hale, chairman of the Senate Committee on Naval Affairs, and by the staff bureau chiefs. Created on March 13, 1900, the board was to consist of the Admiral of the Navy, the Chief of the Bureau of Navigation, the Chief Intelligence Officer and his principal assistant, the president of the Naval War College and his principal assistant, and three other line officers not below the rank of lieutenant commander.⁶⁵

This board provided a means of coordinating the work of the Naval War College and the Office of Naval Intelligence in con-



HENRY C. TAYLOR (AS A CAPTAIN)

Taylor, *loc. cit.*, p. 42. According to D. W. Taylor, Henry C. Taylor as head of the executive committee, which was the position held by the Chief of the Bureau of Navigation, dominated the General Board during his tenure.

⁶⁴Long, *New American Navy*, I, 122-23.

⁶⁵Navy Dept. general order no. 544, Mar. 13, 1900, reproduced by Wainwright, *loc. cit.*, p. 544.

nection with war plans. Cooperation among these organizations was promoted through the practice suggested by Captain Taylor, who as Chief of the Bureau of Navigation from 1902 to 1904 was a member of the General Board, of having it hold its meetings alternately between Washington (winter) and Newport (summer).⁶⁰ To the Bureau of Navigation fell the task of putting into effect the recommendations of the General Board. Admiral George Dewey served as president of the board until his death in 1917, adding much to its prestige. Thus the nucleus of a general staff was created through the efforts of naval officers.⁶⁷ A change in membership of the board prescribed in 1901 omitted the two principal assistants and provided for the appointment of line officers to such number as the department might designate.⁶⁸

The duties of the General Board, purely advisory in character, were to devise measures and plans preparing the fleet for war; to advise the Secretary on the operations of the fleet; to prepare war plans; to determine the military characteristics of warships; to advise the Secretary in regard to shore stations; and to coordinate the work of the Naval War College, the Office of Naval Intelligence, and the Board of Inspection and Survey.⁶⁹

Although the department was unable to secure legislative sanction for the General Board, it continued the board and made it an important instrument in the expansion of the Navy. Not until 1916 did the General Board receive statutory recognition in the

act of August 29. It acquired an important influence in the determination of naval policy, particularly in connection with the shipbuilding program of the Navy. As will be seen, however, it did not satisfy the advocates of a general staff. Admiral Dewey and Rear Admiral Henry C. Taylor became in 1903 representatives of the Navy Department on the Joint Army and Navy Board, which was created at the suggestion of Taylor to coordinate and promote joint interests of the Army and the Navy.⁷⁰

INSPECTOR OF TARGET PRACTICE

Following the Spanish War the Navy Department awoke to a realization of the poor quality of our naval marksmanship. Charged with the work of providing modern armament for the New Navy, the Bureau of Ordnance had been unable during the 1880's to give adequate attention to gunnery training. Like other phases of training, this passed to the Bureau of Navigation in 1889, but gunnery was at first little improved under the direction of this bureau. The score made by American warships in the battle of Santiago was less than 5 per cent. On October 24, 1901, an Inspector of Target Practice, Lt. Albert P. Niblack, was appointed in the Bureau of Navigation.⁷¹ He retired because of ill-health in 1902 and was succeeded on November 5 by Lt. William S. Sims, who was selected by Rear Admiral Henry C. Taylor, Chief of the Bureau of Navigation.⁷²

⁷⁰Memorandum for the Secretary of the Navy, by Jarvis Butler, Secretary, Joint Board, Sept. 23, 1921, O. S. N., general files, no. 16438-7; Navy Dept. general order no. 136, July 18, 1903.

⁷¹W. D. Leahy, Director of Gunnery Exercises and Engineering Performances, to the Bureau of Navigation, Feb. 4, 1920 (report in Office of Naval Records and Library); Office of the Judge Advocate General, naval examining board of record of Albert P. Niblack (National Archives); Navy Dept., *Annual Report*, 1902, p. 402.

⁷²Morison, p. 131; *U. S. Navy Register*, July 1, 1903, p. 11; naval examining board record of W. S. Sims (National Archives).

⁶⁶W. S. Crosley, "The Naval War College, The General Board, and The Office of Naval Intelligence," *U. S. Naval Inst., Proc.*, XXIX (Sept. 1903), 970; Bradley A. Fiske, *From Midshipman to Rear Admiral* (New York, 1919), pp. 476, 548.

⁶⁷Henry C. Taylor, "The Fleet," *U. S. Naval Inst., Proc.*, XXIX (Dec. 1903), 803.

⁶⁸By Navy Dept. general order no. 43, April 16, 1901. Cf. Wainwright, *loc. cit.*, p. 191.

⁶⁹Navy Dept., *Regulations for the Government of the Navy of the United States* (Washington, 1905), p. 19.



WILLIAM S. SIMS (AS A COMMANDER)

Under Sims's direction a new system of gunnery was put into practice. He was the best selection that could have been made to undertake this difficult task, for as a naval attaché at Paris and St. Petersburg he had becoming acquainted with methods in France and Russia and while in the Asiatic Fleet he had learned the new practices of the British, which were then the best in the world.⁷³ Sims had written reports to the department in criticism of the gunnery of the Navy, and these undoubtedly played a part in the establishment of the position to which Taylor appointed him. Against custom and regulations, Sims had written to President Roosevelt calling his attention to the seriousness of the gunnery question and to his reports. Both Taylor and Roosevelt supported him in his

efforts to improve the gunnery methods while Inspector of Target Practice. Through his introduction of the British method of continuous-aim firing and fire control a vast improvement did occur.⁷⁴ Assisted by able officers, Sims was successful by 1909, when he retired from the position, in making American gunnery probably the best in the world. The healthy competition developed in the process contributed greatly to improving the morale of the Navy.

GENERAL STAFF

The movement for a general staff in the Navy Department inaugurated before the Spanish War was continued after the establishment of the General Board because that was not regarded as satisfactory. The general staff was urged by line officers as a means of centralizing the work of the Naval War College, the Office of Naval Intelligence, the General Board, and the Board of Inspection and Survey, of coordinating the activities of the bureaus, and of advising the Secretary.⁷⁵ Lt. William S. Sims, then intelligence officer on the *Brooklyn* in the Asiatic Fleet, found in the defective organization of the department the cause for the construction of inadequate ships for the Navy.⁷⁶ As in previous years the naval officers were still setting forth their schemes of naval administration in

⁷⁴Treated in detail in Morison, pp. 131-47, 235-62; *Theodore Roosevelt: An Autobiography* (New York, 1929), pp. 212-13; Gordon C. O'Gara, *Theodore Roosevelt and the Rise of the Modern American Navy* (Princeton, 1943), pp. 82-93. On the gunnery question see also: Robert W. Neeser, "American Naval Gunnery—Past and Present," *North American Review*, CXCVI (Dec. 1912), 780-91; Bernard Brodie, *Sea Power in the Machine Age* (Princeton, 1941), p. 181; Robley D. Evans, *An Admiral's Log, Being Continued Recollections of a Naval Life* (New York, 1911), pp. 125 ff.; Yates Stirling, *Sea Duty: The Memoirs of a Fighting Admiral* (New York, 1939), pp. 93 ff.

⁷⁵Sprout, p. 275.

⁷⁶See the synopsis of his report on the Board of Construction and the Design of Battleships, Dec. 8, 1901, in Morison, pp. 114-15; see also pp. 79-80, 89; and O'Gara, p. 17.

⁷³Morison, pp. 37 ff.

print.⁷⁷ The principles which they had been learning at the Naval War College inspired them to agitate for the creation of a more efficient organization in the Navy Department

The acquisition of outlying possessions in the West Indies and in the Pacific area as a result of the Spanish War and the establishment in most of these places of naval bases necessitated the enlargement of the Navy. Further incentives to naval expansion were the proposal for an Isthmian canal and the emergence of Germany and Japan as naval powers. New ships were authorized, and the Navy was on the way to becoming second to that of Great Britain. An expanded Navy increased the need for an organization in the Navy Department to direct its use according to sound military principles.⁷⁸

The effort to combine civil and military functions in the Bureau of Navigation had not been very successful. The head of this bureau was too engrossed in the details of administering the personnel of the Navy to have time to formulate war plans. The inability of the bureau to perform properly its military functions was pointed out by Rear Admiral H. C. Taylor in his annual reports

as chief of that bureau in 1902 and 1903. Its limited authority, he added, made this impossible anyway. He accordingly recommended provision by legislation of a general staff for the efficient administration of the fleet. The same view was taken by his successor, George A. Converse, in 1904. Believing that there should be a separate body in the department responsible for its military affairs, Secretary of the Navy William H. Moody made a similar recommendation in his annual report for 1903. President Roosevelt also urged the creation of a naval general staff like that which had been provided for the Army.

The result of the foregoing recommendations was a bill to increase the efficiency of the Navy upon which hearings were held before the House Committee on Naval Affairs in April 1904. The bill authorized the Secretary to constitute a General Board of not

⁷⁷Navy Dept., *Annual Report*, 1909, pp. 5-6; French E. Chadwick, "Navy Department Organization," U. S. Naval Inst., *Proc.*, XX (1894), 493-506; John Hood, "Naval Administration and Organization," in *ibid.*, XXVII (Mar. 1901), 1-27; Stephen B. Luce, "Naval Administration, II," in *ibid.*, XXIX (Dec. 1903), 809-21; Stephen B. Luce, "The Administration of the Navy," in *ibid.*, XXXI (Mar. 1905), 81-96. The United States Naval Institute founded in 1873 by naval officers serving in Annapolis and Washington for the purpose of improving professional concerns began publishing addresses presented before the institute and other papers in its *Proceedings*, which became the foremost vehicle for literary efforts by officers directed towards betterment of the Navy and naval administration. In 1878 a resolution was adopted by the institute offering prizes for essays on given subjects. This was an honor for which some of the most outstanding officers in the service exerted themselves in succeeding years.

⁷⁸Admiral Taylor believed that if more ships were built without providing a general staff the Navy would be facing certain defeat. See his letter to S. B. Luce, June 29, 1904, in Gleaves, p. 240.



WILLIAM H. MOODY

over seven officers "for such general military duties as the Secretary may from time to time direct." Except in case of war or impending war, only the Admiral of the Navy was to serve on the board for a longer continuous period than three years. In its third and last section, the bill provided that the Secretary was to be authorized to detail one of the members of the board as his military adviser who as such was to have the rank of senior rear admiral of the Navy. Aside from this provision, the bill did little more than continue the existing General Board.

In the hearings Secretary Moody made a strong statement in favor of the bill.⁷⁹ The military adviser would keep him in close touch with the board. He said that

this body would have no executive authority whatever. They would issue no orders. They would not supervise the operations of the bureaus at all. All they could do would be to bring to the Secretary such orders as they believed should be given for the efficiency of the Navy; and they must convince him that they are right before those orders are issued.

In the course of his testimony the Secretary indicated that he intended to ask Rear Admiral Taylor to resign as chief of the Bureau of Navigation to accept the position as military adviser although he would have to go to sea within a year. It was further revealed that this bureau would be relieved of most of its duties relating to the military affairs of the Navy through the transfer of the Naval War College and the control of the movements of ships. Concerning the latter subject, the General Board would report to the Secretary who would have to pass upon its recommendations. The Secretary considered it a "calamity that the Bureau of Navigation has had superimposed upon it a host of extralegal duties." He thought that there

would always be jealousy among the other bureaus so long as it retained those duties. Admiral Dewey and Rear Admiral Taylor appeared before the committee and fully endorsed the views of the Secretary.

The opponents of the bill in the Navy Department were the Assistant Secretary, Charles H. Darling, who had occupied that position since 1901, and most of the bureau chiefs. Said the Assistant Secretary

Among other reasons, I disapprove of this measure on three general grounds: First, the effect of this measure will be to make the Secretary of the Navy an ornamental figurehead. Second, the measure savors too much of militarism to be consistent with the spirit of our institutions, even in the administration of the Navy Department. Third, which is the corollary of the second, the military element of the Navy Department already has all the power and all the influence that it ought to have, either in the administration of the Department or in making recommendations to Congress.⁸⁰

Mr. Darling regarded the legislation as unnecessary since the Secretary already had the authority which the bill gave, except for the section authorizing the military adviser. This officer, he believed, would come to exercise an undue influence upon the civilian secretaries and would become the sole avenue of approach to them. The powers of the General Board should be restricted rather than extended, for it was performing administrative duties which were not within its sphere. He thought the board had done some good work and that it was a good institution, but he said

I know of no reason whatever why this Board should be established by law. The claim that the Board lacks standing and dignity is without foundation. Some of the ablest and brightest men in the Navy are serving on and with the Board, and these men bring to the Board the dignity and standing that it deserves.

⁷⁹House Committee on Naval Affairs, *Hearings*, 54th Cong. H. R. 15403 for a General Board (Washington, 1904), pp. 909 ff.

⁸⁰*Ibid.*, p. 927.

It is in practice the most influential and the most controlling force in the Navy to-day. Although it has no authority to issue orders, nevertheless, on a proposition fairly within its jurisdiction, in practice it outweighs the judgment of any bureau.⁸¹

The bureau chiefs feared encroachments upon the matter under their cognizance and in consequence opposed the passage of the bill or favored amendment of its vague terms. True to its tradition, the House failed to support the bill, whose advocates, it can undoubtedly be said, were sincere in their efforts to secure the establishment of a needed instrument in the department.

An interesting proposal was brought forward by Admiral Luce, who, since his retirement in 1889 after forty-eight years of service in the Navy, had continued to advocate improved naval administration. He suggested in a letter to Admiral Taylor that under the authority given the Secretary by the act of August 30, 1842, to distribute the duties of the department among the bureaus an executive order be issued establishing in the Bureau of Navigation an Office of Naval Operations.⁸² He thought Taylor should head the office, the duties of which would be those of a general setaff. Taylor, however, believed that they should continue with General Board methods, not wanting to create a rival in the department which would endanger what had been accomplished.⁸³ Luce made a similar suggestion to the Secretary of the Navy in 1907. This influential admiral was also interested in a reform movement then being carried on by some insurgent officers in the Navy.⁸⁴

⁸¹*Ibid.*, p. 933.

⁸²Luce to Taylor, June 25, 1904, in Gleaves, pp. 238-39.

⁸³Taylor to Luce, June 29, 1904, in *ibid.*, p. 240.

⁸⁴See his article "The Fleet," *North American Review*, CLXXV (Oct. 1908), 564-76, in which he urged the appointment of a commission to investigate and make recommendations.

The next effort to improve naval administration by securing the formation of a general staff utilized the methods of the reformers who were then active in various fields. It was the era of the muckrakers. In the Navy there were a number of officers who were interested in improving conditions.⁸⁵ Most active among them were Albert Lenoir Key, Naval Aide to the President, 1905-1907, and William S. Sims, Inspector of Target Practice, 1902-1909, and Key's successor as Naval Aide. To arouse public opinion, Sims assisted Henry Reuterdaahl, American editor of *Jane's Fighting Ships*, in the preparation of an article on "The Needs of Our Navy" which was published in *McClure's Magazine* for January 1908. In this attack startling defects in the new ships of the Navy were revealed. The result was an investigation by the Senate Committee on Naval Affairs during February and March 1908 in which the reformers were able to prove that some of the charges made by Reuterdaahl were true.

The object of Key and Sims was to demonstrate that the fundamental reason for the inadequacies lay in improper naval administration and to propose as a solution the creation of a general staff. Neither was given much opportunity, however, to go into the organization of the department.⁸⁶ The defects of the bureau system were explained to the committee, but it abruptly ended the hearing before the conclusion of Key's testimony and made no recommendation.

The reformers did not give up. Key and Sims brought to the attention of the President certain defects in the *North Dakota* then under construction and proposed the calling of a conference of the members of the General Board, the staff of the Naval

⁸⁵For an excellent treatment of this matter see Morison, pp. 176 ff.

⁸⁶Senate Committee on Naval Affairs, *Alleged Structural Defects in Battleships: Hearings . . .* (Washington, 1908), pp. 157, 310; O'Gara, p. 43.

War College, and certain young officers to consider the matter. The conference met at Newport in July and August 1908, but although it went on record concerning certain defects in the *North Dakota*, its outcome was disappointing. Again the main objective—the reorganization of the Navy Department—was not attained.

AND SYSTEM

Other strategy having failed, the reform element in the Navy led by Commander Sims, then urged upon the President the desirability of taking action in regard to the reorganization of the Navy Department before the expiration of his second term of office.⁸⁷ In his annual message for 1908 he renewed the recommendation for a general staff and the consolidation of the bureaus. Roosevelt concurred with Sims's suggestion of the appointment of a commission, but he delayed, and in the meantime a new Secretary of the Navy, Truman Newberry, who had won a reputation as an administrator while Assistant Secretary for several years past, entered office with a plan of reorganization of his own. Finally the President, after being again prodded by Sims, appointed in January 1909 a mixed commission of civilians and naval officers.⁸⁸ Headed by ex-secretary W. H. Moody, this body held a conference in Washington and submitted a report in which it endorsed Newberry's plan of reorganiza-



TRUMAN NEWBERRY

⁸⁷Morison, pp. 216 ff. Secretary of the Navy Charles J. Bonaparte had proposed a commission in his annual report of 1906.

⁸⁸Moody conference report, Jan. 15, 1909, O. S. N., general files, no. 27175-2; statement by Secretary Newberry in House Committee on Naval Affairs, *Hearings . . . on Estimates Submitted by the Secretary of the Navy, 1909* (Washington, 1909), p. 862. The Moody conference report was signed by William H. Moody, Paul Morton (ex-secretaries), Alston G. Dayton (Congressman), and the following rear admirals: S. B. Luce, A. T. Mahan, Robley D. Evans, William M. Folger, William S. Cowles, and Commander William F. Fulham, Secretary.

tion as a temporary measure and recommended the appointment of a commission to prepare and recommend a permanent reorganization of the Navy Department.⁸⁹ The suggestion was made that the commission be

⁸⁹*Ibid.* The report was published in *ibid.*, p. 864.

originated by Congress.

Under the plan proposed by Secretary Newberry on January 12, 1909, the department was to be reorganized under existing law through orders of the President and the Secretary of the Navy.⁹⁰ The membership of the General Board was to be rearranged, and its president, the Admiral of the Navy, or in his absence the Chief of the Bureau of Navigation, was to be practically a chief of staff. The board was to meet in daily consultation on all matters of importance to the Navy. The Board of Construction was to consist of seven line officers and one staff officer (the Chief Naval Constructor) and was to be the coordinating authority for the manufacturing branches of the department. The duties of the four constructing bureaus, viz., Ordnance, Equipment, Steam Engineering, and Construction and Repair were to be reassigned so that the work of drafting and manufacturing would be done by the last-named bureau. The bureaus and offices of the department were to be distributed as follows: Assistant Secretary: Bureau of Supplies and Accounts, Solicitor; General Board: Bureau of Navigation, Bureau of Medicine and Surgery, and the Judge Advocate General; Board on Construction: Bureau of Construction and Repair, Bureau of Steam Engineering, and the Bureau of Ordnance. The duties of the Bureau of Equipment were to be transferred to the Bureaus of Construction and Repair, Navigation, and Supplies and Accounts, while those of the Bureau of Yards and Docks were to be turned over to the yards and stations. As will be seen, this scheme had some similarities to the system adopted by Secretary Meyer in that it provided a multiple coordination of the business of the Department. So far as general staff work was concerned, it left much to be desired.

⁹⁰*Ibid.*, pp. 862-64.

On January 27, 1909, however, the President appointed a commission comprising the same membership as the body appointed earlier that month. In February the commission submitted two reports. The first on February 20, dealing with general principles of naval administration, upheld the supremacy of the Secretary of the Navy and defined the division between the civil (technical) and military duties of this official.⁹¹ The former concerned the material of war and were handled by the bureaus; the latter concerned the use of that material, but there was no provision in the department for the direction of that use. The Secretary had the power to coordinate the work of the bureaus, but he needed an advisory body to give him the professional advice which he lacked. These advisers should be taken from the military naval officers because theirs was the responsibility of handling the navy as an instrument of war. These officers should compose a general staff at the head of which should be an individual officer responsible to the Secretary. The necessity of proper administration for success in war was pointed out.

A specific plan of reorganization was the subject of the second report submitted on February 26, 1909.⁹² This plan provided as follows:

THE SECRETARY

THE ASSISTANT SECRETARY
(First Division)

A civilian: a "man of affairs."

⁹¹Published in *U. S. Naval Inst., Proc.*, XXXV (Mar. 1909), 300-302, and in *House Committee on Naval Affairs, Hearings . . . on Estimates Submitted by the Secretary of the Navy, 1916* (Washington, 1916), pp. 2663-65; and abstracted in Morison, pp. 226-28. Commander Fullam, the secretary of the commission, gives an account of it in *Senate Committee on Naval Affairs, Naval Investigation Hearings . . . Sixty-Sixth Congress, Second Session* (Washington, 1921), pp. 810-11, 3375-77. According to him Mahan wrote the statement of general principles.

⁹²Published in 60 Cong., 2 Sess., *Senate Document No. 743*, pp. 3-4, and *House Committee on Naval Affairs, Hearings . . . 1916*, pp. 2667-69.

In charge of the business of the Bureau of Yards and Docks, the Bureau of Supplies, and the Bureau of Medicine and Surgery.

The general accounting.

The office of the solicitor.

The employment of civilians.

The library; and kindred subjects.

NAVAL OPERATIONS (Second Division)

The Chief of the Division of Naval Operations.
(Principal military adviser to the Secretary.)

To be a flag officer.

To be without administrative functions, but to be the ex-officio head of the General Board and the Board of Construction.

To supervise war plans; naval policy; the War College; the Office of Naval Intelligence, and kindred subjects.

PERSONNEL (Third Division)

The Chief of the Division of Personnel.

To be a flag officer.

To be charged ex officio with the business of the Bureau of Navigation; all educational institutions except the Naval War College; the Marine Corps; discipline; the Office of the Judge Advocate General; the Naval Observatory, and kindred subjects.

INSPECTION (Fourth Division)

The Chief of the Division of Inspection.

To be a flag officer.

To be charged with the duties pertaining to the trials of ships, to the inspection of fleets, squadrons, and ships, of navy yards and stations, of sites for naval stations, and kindred subjects.

MATERIEL (Fifth Division—the Technical Division)

The Chief of the Technical Division.

To be a flag officer, a naval constructor, or a civilian with a technical training.

To be in supervisory charge of the business of the four technical bureaus of Construction, Ordnance, Engineering, and Equipment.

THE COUNCILS

The chiefs of the five grand divisions to form the Secretary's general council.

The chiefs of the second, third, and fourth divisions (Operations, Personnel, and Inspection) to form the Secretary's military council, but of these the Chief of Naval Operations is the sole responsible adviser. No chief of bureau, while acting as such, to act as chief of a division.

The military members of the general council to be appointed by the President, with the advice and consent of the Senate, for a period of three years, and, with the exception of the Chief of the Division of Naval Operations, to be ineligible for reappointment except after an intervening period of three years.

These reports were transmitted to the President on February 26, 1909, and were presented by him to the Senate on the following day. Nothing came of them.

What Congress failed to do by law the next Secretary of the Navy effected by his own order. Roosevelt's Postmaster General, George von L. Meyer, became Taft's Secretary of the Navy. He made a personal study of reports relating to naval administration



G. V. L. MEYER



REAR ADM. WILLIAM SWIFT

and was so impressed with the need for reform that he appointed a board on July 15, 1909, under Rear Admiral William H. Swift. To it he submitted the material he had collected, including the report of the Moody Commission, with instructions to consider and report a plan of organization for the Navy Department.⁹³

The scheme presented by the Swift Board was substantially that of the Moody Commission, which had been prepared in outline only.⁹⁴ Its report rendered on October 11,

⁹³M. A. DeWolfe Howe, *George von Lengerke Meyer* (New York, 1920), p. 467; House Committee on Naval Affairs, *Hearings on the Proposed Reorganization of the Navy Department* (Washington, 1910), p. 34.

⁹⁴Report of a board on the reorganization of the Navy Department, dated Oct. 11, 1909, O. S. N., general files, no. 27325-2. This report was published in the hearings cited in the preceding footnote (pp. 92-113) and in House Committee on Naval Affairs, *Hearings on Estimates Submitted by the Secretary of the Navy, 1915* (with additions) (Washington, 1915), following p. 1270 with separate pagination. This plan was similar to that proposed by French E. Chadwick in his article "Navy Department Organization," *U. S. Naval Inst., Proc.*, XX (1894), 493-506.

1909, contained a statement of general principles and arguments and a description of the plans of organization recommended to be put into effect. Two plans of organization were presented with diagrams and drafts of changes in Navy regulations (edition of 1909) necessary to put the plans into effect with or without legislation. Secretary Meyer, familiar with the temper of Congress, acted before it came into session and chose the plan which could be effected by changes in Navy regulations without any legislation. He issued on November 18, 1909, *Changes in Navy Regulations*, No. 6, effective December 1, which were based upon the draft prepared by the Swift Board and provided as follows:

4. To aid the Secretary in efficiently administering the affairs of the Navy Department, the work thereof shall be grouped under four general divisions, as follows:

- (a) Division of Operations of the Fleet
- (b) Division of Personnel
- (c) Division of Material
- (d) Division of Inspections

4A. The Division of Operations of the Fleet shall include the Office of Naval Intelligence, the Naval War College, and a Section of Movements of the Fleet.

4B. The Division of Personnel shall include the Bureau of Navigation, the Bureau of Medicine and Surgery, the Office of the Judge-Advocate-General, and Naval Examining and Retiring Boards, and shall have cognizance of matters affecting the Naval Militia.

4C. The Division of Material shall include the Bureau of Equipment, Bureau of Ordnance, Bureau of Construction and Repair, Bureau of Steam Engineering, and Bureau of Supplies and Accounts.

4D. The Division of Inspections shall include the Board of Inspection and Survey for Ships, the Board of Inspection for Shore Stations, and the special inspecting officers.

4E. (1) To assist the Secretary of the Navy in coordinating and carrying on the work of the four divisions, there shall be on duty in the office of the Secretary four officers of the Navy, on the active list, to be known, respectively, as the (a) Aid for Operations; (b) Aid for Personnel; (c) Aid for Material; (d) Aid for Inspections.

The Aids for Operation, Personnel, and Inspections shall be line officers. These Officers shall advise the Secretary on all matters pertaining to the duties of the respective divisions named, and shall transmit orders of the Secretary to the various chiefs of bureaus and to the other subordinates of the Department, signing such orders, "By direction of the Secretary."

(2) Each of the above-named aids shall have an assistant, to be detailed by the Secretary of the Navy from officers on the active list of the Navy, who shall, in the absence of the aid, succeed temporarily to the duties of the latter.

5. The general correspondence of the Department of the Navy shall be under the immediate supervision of the Secretary of the Navy.

The line officers appointed by the Secretary to head the divisions were: Rear Admirals Richard Wainwright, William P. Potter, William H. Swift, and Aaron Ward, respectively. By another prominent officer of that day these were characterized as excellent appointments, indicating that the Secretary was not influenced by political considerations in his selections.⁹⁵ Instead of being called "chiefs," as proposed by the plans upon which the reorganization was founded, the heads of the divisions came to be known as "aids" and the whole organization as the "Aid System." It was also called the "Meyer System." The aids formed the Secretary's advisory council, which constituted a sort of general staff.

In his annual report the Secretary presented arguments, based upon the Swift report, for the reorganization that had been effected.⁹⁶ He was able to persuade Congress to allow the system to operate for a while to see how it worked. Subsequently recommendations were made by Meyer for the legalization of the Aid System, but Congress never relented.

The Aid System was an improvement in naval organization, but it was not what the naval officers had been agitating for. It did

not go far enough. The functions of the aids were advisory in character; they could issue no orders except through the Secretary. They were equal in authority. They could coordinate the bureaus under their respective jurisdictions, but there was no office, except that of the Secretary, to coordinate the aids. Since the authority of the bureau chiefs was curtailed, the aid system was not popular with them.⁹⁷

The establishment of the Aid System resulted in the abolition of the Board on Construction. This had been recommended by the Swift Board, as the head of the Division of Material and the chiefs of the bureaus comprised in the division would form a body for the discussion of technical questions relating to plans for ships, while questions of policy would be referred to the Division of Operations of the Fleet. The Board on Construction had been under attack by Comdr. W. S. Sims and other officers because of faults discovered in new warships. The board no longer performed the functions of a deliberative body; the bureau chiefs comprising it were busy, and their action on the board became largely perfunctory.⁹⁸

DIVISION OF OPERATIONS OF THE FLEET

Changes in Navy Regulations, No. 6, November 18, 1909, prescribed as follows concerning the Division of Operations of the Fleet:

7. (1) The Aid for Operations shall advise the Secretary as to strategic and tactical matters, in conjunction with the recommendations of the General Board as covered by section 7 of this chapter, and shall also advise regarding the operations of the vessels of the Navy.

⁹⁷For an account of the working of the "Aid System" see N. L. Jones, "Details of Navy Department Administration; Navy Department Policies," U. S. Naval Inst., *Proc.*, XL (Mar.-Apr. 1914), 377-88.

⁹⁸"Memorandum upon the Board of Construction Recently Discontinued," in Meyer Papers (National Archives). The abolition of this board was effected by *Changes in Navy Regulations*, No. 6, Nov. 18, 1909.

⁹⁵Fiske, p. 458.

⁹⁶Navy Dept., *Annual Report*, 1909, pp. 5-7.

(2) He shall prepare all orders governing the movements of vessels which are issued by the Navy Department. In order to prevent conflicting instructions, and to control the readiness of ships for service, all communications to or from the bureaus of the Division of Personnel and Material relative to the readiness or condition for service of ships in commission shall be forwarded to the Secretary of the Navy direct; but when a definite date has been approved for the completion of repairs or changes, only such communications as may affect the date of completion shall be so forwarded. All reports of movements of ships heretofore made to the Bureau of Navigation shall hereafter be made to the Secretary of the Navy direct.

(3) He shall keep the records of service of all fleets, squadrons, and ships, and shall furnish to the Bureau of Navigation such data relating thereto as may be necessary for the preparation of the annual Navy Register. All reports of service performed by ships shall be forwarded to the Secretary of the Navy.

(4) He shall be charged with the promulgation and record of General Orders and Special Orders issued by the Secretary of the Navy, and with advising the Secretary as to the enforcement of such of these as relate to operations of the fleet.

(5) He shall be charged with the preparation, revision, and advising the Secretary in regard to the enforcement of all tactics, drill books, signal codes, and cipher codes, and with the preparation and revision of the Regulations for the Government of the Navy.

(6) He shall advise the Secretary as to all matters pertaining to target practice, steaming efficiency tests, and like matters of fleet training.

(7) He shall advise the Secretary as to all matters pertaining to the location and other features affecting the military value of wireless telegraph stations.

(8) He shall advise the Secretary as to all matters pertaining to operations, maneuvers (strategical and tactical), and organization of the fleet.

(9) He shall, in conjunction with the General Board, make recommendations as to the military features of all new ships, as to any proposed repair or alteration to a ship which will affect any military feature, and as to the expediency of undertaking extensive repairs to any ship. (Art. 16)

(10) He shall make recommendation, in conjunction with the General Board, regarding the lo-

cation, capacity and protection of coal and fuel depots and supplies of coal and fuel, together with the location, equipment, general arrangement, and protection of naval stations, reserve of ordnance and ammunition, and depots of supplies, with a view to meeting effectively the demands of the fleet; and shall advise the Secretary as to controlling the delivery to the fleet of provisions and stores of every kind required therefor. He shall, in conjunction with the General Board, recommend the number, type, and all features which affect the military value of all dry docks of whatsoever nature.

(11) When fuel or water is to be transported for the use of ships, the Aid for Operations shall inform the Bureau of Equipment as to the quantity, place, and time of delivery, and such transportation shall be made in naval auxiliary ships, under the direction of the Department, or in merchant vessels, as circumstances may require.

(12) He shall, in conjunction with the General Board, advise the Secretary as to coordinating the work of the Naval War College and the Office of Naval Intelligence.

Changes were subsequently made in the foregoing as follows:

(C.N.R., No. 15:)

Paragraph I. Add the following sentence:

He shall advise the Secretary as to the submission of subjects to the General Board and Naval War College; and, in order that he may properly perform this duty, all papers which are required to be submitted to the General Board or War College shall be forwarded to the department (Division of Operations of the Fleet) for such reference.

(C.N.R., No. 17:)

Paragraph 6: Insert a new paragraph 6, reading as follows:

(6) He shall advise the Secretary as to all matters pertaining to the construction and meaning of the Navy Regulations, Naval Instructions, and all Navy Department General and Special Orders, such advice to be given after conference with such other aids and such chiefs of bureau and heads of offices as may have cognizance of the subject at issue. All correspondence relating to such subjects shall be addressed or referred to the Secretary of the Navy (Division of Operations of the Fleet).

Re-number succeeding paragraphs accordingly.

(C.N.R., No. 19:)

Modify paragraph 11 to read:

(11) He shall make recommendation, in conjunction with the General Board, regarding the location, capacity, and protection of fuel depots and supplies of fuel, and of naval stations; and also in regard to the establishment and maintenance of reserves of ordnance and ammunition, and depots of supplies, with a view to meeting effectively the demands of the fleet; and shall advise the Secretary as to controlling the delivery to the fleet of provisions and stores of every kind required therefor. He shall, in conjunction with the General Board, recommend the number, type, and all features which affect the military value of all dry docks of whatsoever nature.

The appointment of the Aid for Operations in charge of the Division of Operations of the Fleet marked a distinct advancement towards the realization of a full-fledged naval general staff. It was the beginning of the concentration in a single office of responsibility for the planning and coordination functions then exercised by a number of scattered offices over the military affairs of the department.

The creation of this division initiated the decline of the Bureau of Navigation as the most powerful organization in the department. From it were transferred the Naval War College, the Office of Naval Intelligence, the Inspector of Target Practice, and control of ship movements, to the jurisdiction of the Aid for Operations.⁹⁹ This officer also took the place of the Chief of the Bureau of Navigation on the General Board. Rear Admiral Wainwright was able to give his entire attention to the operations of the fleet and, in conjunction with the Naval War College and the General Board, to war plans and strategical matters. Within a year after his appointment he was able to devise a reorganization of the fleet which promoted efficiency



RICHARD WAINWRIGHT (AS A CAPTAIN)

and resulted in a more even flow of repair work to the navy yards.¹⁰⁰

OFFICE OF TARGET PRACTICE AND ENGINEERING COMPETITIONS

A newly organized office, the Inspector of Engineering Competitions, was also transferred from the Bureau of Navigation. The improvement in gunnery, effected in part by the use of competition between gun crews, was followed in 1909 by the institution of yearly competitive steaming tests in the fleet.¹⁰¹ The object was to discover the most economical means of using such coal, oil, and other supplies which warships carried, as

⁹⁹The title of the head of the Office of Naval Intelligence was changed by Navy Dept. general order no. 132 of Nov. 20, 1911, from Chief Intelligence Officer to Director of Naval Intelligence.

¹⁰⁰Navy Dept., *Annual Report*, 1910 p. 6.

¹⁰¹By Navy Dept. general order no. 26, June 4, 1909; report of W. H. Leahy cited in note 71 above; Navy Dept., *Annual Report*, 1909, pp. 33, 306.

upon the performance of their engines depended their efficiency in battle. Trophies and prizes which had been found so effective in stimulating marksmanship in the Navy were also employed in this new competition. The Office of Inspector of Engineering Competitions was established in the Bureau of Navigation by departmental order in July 1909.¹⁰² This office was combined with that of the Inspector of Target Practice in 1910, thus bringing it under the Division of Operations. On February 2, 1911, the new title of Office of Target Practice and Engineering Competitions under a director was designated by departmental order.¹⁰³

OFFICE OF NAVAL AERONAUTICS

The Navy had been interested in the airplane, which had been successfully flown by the Wright brothers in 1903, but had been slow in adopting it for naval use. After the attachment of Capt. Washington I. Chambers to the Bureau of Navigation in 1911 to devote his time to aeronautics, greater progress was made.¹⁰⁴ During the intervening years the first experiments had been conducted in using naval vessels as carriers, in catapult launching, and in developing the hydroplane for naval use with Glenn H. Curtiss. The Navy acquired its first planes in October 1911 and aviation stations on the Severn River across from Annapolis and on North Island near San Diego, California. Lack of enthusiastic support by the department and meager appropriations caused very slow development.

When Rear Admiral Bradley A. Fiske was appointed Aid for Operations on February 11, 1913, he gave his attention to the devel-

opment of naval aviation. Study of this matter beginning in 1910 upon his assignment to the General Board had convinced him of its great possibilities for naval warfare.¹⁰⁵ Fiske found the Navy Department to be behind foreign navies in its support of naval aviation, and he attempted to do what he could to promote it. He persuaded Capt. Mark L. Bristol, who had just returned from an Asiatic cruise, to accept the aeronautics post under his direction.¹⁰⁶ Captain Bristol began this detail in December 1913,¹⁰⁷ and as Fiske could get him no office he shared his own large desk with him. Captain Chambers was kept on duty with Bristol as adviser on aeronautics. The Office of Naval Aeronautics was established on July 1, 1914, in the Secretary's Office under Fiske, the head of the office being called the Director of Naval Aeronautics.¹⁰⁸

Direction of aviation passed to the Aid for Material on March 1, 1916, when Captain Bristol was ordered to sea to command the U.S.S. *North Carolina*.¹⁰⁹ Lt. C. K. Bronson was detailed as assistant for aviation to Captain McKean and continued in the post until his death in an accident in November 1916. He was succeeded by Lt. John H. Towers, one of the pioneer aviators of the Navy.

¹⁰⁵Fiske, pp. 478, 481. In 1912 Fiske secured a patent for a torpedo plane, and on May 11, 1912, he made a flight in a hydroplane piloted by Phillips Ward over the harbor of Salem, Mass., being the first naval officer of his rank to make an official flight.

¹⁰⁶*Ibid.*, pp. 538-39.

¹⁰⁷Naval examining board record of M. L. Bristol; Director of Aeronautics, annual report on aeronautics, Jan. 19, 1916, O. S. N., general files, no. 5087-129; Miller, p. 149; House Committee on Naval Affairs, *Hearings* . . . 1916, p. 1816.

¹⁰⁸Memorandum for the bureaus of the department, Nov. 16, 1914, O. S. N., general files, no. 28479-53. The office was established by *Changes in Navy Regulations*, No. 4, July 1, 1914.

¹⁰⁹Statement of Rear Admiral J. S. McKean, May 5, 1920, in Senate Committee on Naval Affairs, *Naval Investigation Hearings*, p. 1860; "Record of Development of Aviation in the United States Navy," in *ibid.*, p. 2681.

¹⁰²President's Commission on Economy and Efficiency Form 3a, O. S. N., general files, no. 28067

¹⁰³*Ibid.*; Naval examining board record of Leigh C. Palmer, who was the first director.

¹⁰⁴The history of naval aviation is treated in Harold B. Miller, *Navy Wings* (New York, 1937); see also W. H. Sitz, *A History of U. S. Naval Aviation* (Washington, 1930).

NAVAL RADIO SERVICE

When first taken up by the department, radio work was handled by the Bureau of Equipment. Officers under its direction studied Marconi's system as early as 1899. Beginning in 1903 radio sets were installed upon naval vessels and at shore stations.¹¹⁰ In 1910 cognizance of wireless telegraphy was transferred from the Bureau of Equipment to the Bureau of Steam Engineering. As a result of the passage of the act of August 13, 1912, which provided for the opening of naval radio stations to commercial business, for the examining and licensing of all private and commercial apparatus and operators, and for federal control of all radio apparatus, it was decided to establish an office to administer the naval radio service. Accordingly the administrative functions were entrusted to the Naval Radio Service under a superintendent whose office was located at the radio station in Arlington, Virginia.¹¹¹ Until 1914 this service operated under the jurisdiction of the Bureau of Navigation; it was then transferred to the Division of Operations.¹¹²

DIVISION OF INSPECTIONS

The Division of Inspections was set up to provide for an inspection of naval activities by persons other than those who were respon-

sible for those activities. The Board of Inspection and Survey was transferred to this division from the Bureau of Navigation. While under the Division of Inspections, this came to be called the Board of Inspection and Survey for Ships. This was necessary to distinguish it from the Board of Inspection for Shore Stations, which was authorized at the time the Aid System was established.¹¹³ Capt. Alexander Sharpe reported to Capt. Aaron Ward as president of this board on January 10, 1910, but he died before he could organize it. He was succeeded on February 28, 1910, by Capt. W. H. H. Southernland. The function of this board was to inspect at least annually the condition and efficiency of all shore stations. The board was shortly provided with an inspector of public works, an inspector of engineering, and inspectors of the pay corps, who under a general inspector inspected accounts of pay officers at shore stations and receiving and other ships on special service. As late as 1913 the Aid for Inspections reported there was a tendency among the bureaus to usurp the functions of the division, particularly those of the Board of Inspections for Shore Stations, contrary to the Navy regulations of 1913.¹¹⁴ This board ceased to exist on August 31, 1914, upon the detachment of the officers assigned to it, and in the same way the Division of Inspections came to an end on October 21, 1914.¹¹⁵

(To be continued)

¹¹⁰William H. G. Bullard, "United States Naval Radio Service," U. S. Naval Inst., *Proc.*, XL (Mar.-Apr. 1914), 431-71.

¹¹¹By Navy Dept. general order no. 240, Nov. 9, 1912.

¹¹²Naval examining board record of W. H. G. Bullard, fitness reports, April 1 to Sept. 30, 1914, and Oct. 1, 1914, to Mar. 31, 1915, signed by B. A. Fiske, Aid for Operations. Bullard served as superintendent from 1912 to 1916. By regulations the Naval Radio Service remained under the Bureau of Navigation, but gradually it came to operate under the Division of Operations of the Fleet, whose duties were more logically concerned with communications. Cf. report of board on organization U. S. Naval Radio Service, Feb. 20, 1915, p. 62, O. S. N., general files, no. 12479-794.

¹¹³Navy Dept., "History of the Board of Inspections for Shore Stations (Division of Inspections)," prepared by Edward W. Collamore, Oct. 22, 1927 (National Archives).

¹¹⁴Aid for Inspections W. F. Fullam to Secretary of the Navy, Apr. 2, 1913, O. S. N., general files, no. 28360.

¹¹⁵Collamore gives Nov. 3, 1914, as the date for the detachment of Capt. Augustus F. Fechteler as Aid for Inspections, but his record of service in his naval examining board record gives Oct. 21.

THE POWER OF VICTORY

Munitions Output in World War II

By RAYMOND W. GOLDSMITH*

I

Figures, it has been said, may not rule the world, but they show how it is ruled. Similarly, statistics may not win wars, but they certainly show how they are won. Hardly a better proof of this claim can be found than the statistics of munitions production before and during World War II. The cold figures of the output of airplanes, tanks, guns, naval ships, and ammunition, particularly when they are reduced to the still colder form of indices of aggregate munitions production of the major belligerents, probably tell the story of this war in its essentials as well as extended discussion or elaborate pictures: the initial disadvantage of the Western Allies; the surprising stand of the USSR; the rapid improvement in the United Nations' position in 1943; their decisive superiority over Germany in 1944; and the rapid collapse of Japan once the theater of war was restricted to the Pacific. They back to the full the thesis, dear to the economist's ear, that whatever

may have saved the United Nations from defeat in the earlier phases of the conflict, what won the war for them in the end, was their ability—and particularly that of the United States—to produce more, and vastly more, munitions than the Axis.

That the munitions production potential of the United Nations was far in excess of that of their enemies has, of course, been known to everyone familiar with the world's industrial statistics. Enough figures, too, had become known during the war to indicate clearly that this potential advantage of the United Nations was transformed more and more completely into a superiority in the actual deliveries of implements of war. As this knowledge spread it helped to strengthen the confidence of the leaders of the United Nations and drove Adolf Hitler to the childish but characteristic device of forbidding the discussion in Germany of American war production statistics. It is only now, however, that enough authoritative figures have been disclosed for all major belligerents except the USSR—voluntarily by the victorious United Nations, under compulsion by the defeated Axis powers—to reconstruct with a fair degree of confidence the course of munitions production during the war in each country and to compare the level of munitions production between belligerents.

There are basically two ways to obtain a summary expression for a country's munitions output.¹ We may take a large number

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¹Munitions for the purpose of these statistics include all aircraft, naval ships, guns, small arms, armored vehicles, ammunition, electronic and communications equipment; merchant vessels, unarmored motor vehicles, engi-

of weapons, express the output of each of them as a percentage of production during a base period and average these percentages with due regard to differences in importance. Or we may use aggregate expenditures on munitions as the basis of calculation, adjusting for changes in the price of munitions as we would do in deriving indices of the quantity of consumption from data on the money spent by consumers and the prices paid by them. Both methods have their technical difficulties. Adequately handled they will, however, give similar results. In the present state of our information we are forced to use the first method for some countries and the second for others. Quantity indices of munitions production, based on detailed statistics of the output of all important types of armaments, are available, and have been used here, for the United States, the United Kingdom, Canada, and Germany. For USSR and Japan, on the other hand, we still have to rely on estimates of total expenditures on munitions production and have no reliable information of the quantity of production of individual weapons. This deficiency will soon be remedied for Japan as United States Strategic Bombing Survey results become available, but our ignorance of the details of Russia's war production record may persist for a long period.

II

In 1944, the United States produced over two-fifths of the entire world's munitions output and about 50 per cent more than either all its allies or all its enemies combined.²

The United States, to begin with, turned

out about four times as many munitions as the United Kingdom. Compared to our output of 96,000 planes, the British produced less than 30,000. Since we concentrated on the heavier types, preponderance in weight was more pronounced: 965 million pounds against slightly over 200 million pounds, or more than four to one for a category accounting for about two-fifths of total combat munitions production. Our advantage was more striking still in naval vessels, completion of 3,324,000 tons comparing with about 500,000 tons in Great Britain. British production, on the other hand, was somewhat nearer that of the United States in ground army equipment. Even here, however, United States output generally was at least three times as large as that of the United Kingdom; of tanks, for instance, we turned out 17,600 against Britain's 5,000.

For a comparison of our own munitions production with that of the USSR, we must rely to a good extent on the two countries' expenditures on munitions. If we assume that in the field of armaments the purchasing power of the ruble corresponded approximately to its official exchange rate, i.e., \$0.20 — an assumption not warranted for civilian type commodities — USSR output in 1944 should have been near 40 per cent of the United States level. The fragmentary data on the output of important categories of munitions recently disclosed by Marshal Stalin in his election address of February 9 confirm this estimate. The 40,000 planes claimed for the USSR for the average of the years 1942 to 1944 compare to nearly 80,000 in the United States; by weight, however, Russian aircraft production can hardly have been much in excess of one-third ours. In the naval field, of course, USSR output was insignificant compared to United States production. But in ground army equipment the Soviet Union in the aggregate seems to have lagged only slightly behind the United

neers' supplies, quartermaster items and medical supplies are excluded. This definition concentrates attention on the combat items that are of prime military importance.

²The relative position of the United States is slightly more favorable still if semi-military items like merchant vessels, automotive vehicles, engineer and quartermaster supplies are included.

States, probably by not more than 20 to 30 per cent. For some categories, such as machine guns, mortars, and ammunition, USSR output was decidedly smaller than ours. On the other hand, the Soviets apparently turned out as large quantities as the United States of several important weapons such as guns, small arms, and armored fighting vehicles.

We are on firmer ground in the case of Germany. If the official statistics can be trusted—and there is still some doubt on this point—Germany in 1944 produced no less than 40,000 planes, about two-fifths United States output. As almost three-quarters of her output consisted of fighters compared to only two-fifths of ours, German aircraft production, by the test of weight or value, can hardly have been in excess of one-third the United States level. German naval construction, of course, amounted only to a fraction of ours: Submarine launchings, representing a large part of the output of Germany's shipyards, totalled only 275,000 tons, well under one-tenth of our naval construction.

Among items of ground army equipment, variation was wide. In some items, German production apparently was only about one-third as large as United States output; production of machine guns for instance totalled 277,000 compared to nearly 800,000 in the United States. German tank production of over 8,000 vehicles, however, was equal to about one-half United States output. Finally, there apparently were a number of items, particularly guns, small arms, and ammunition, in which German output was nearly as large or larger than American production. For ground army equipment as a whole, German production may be put tentatively at somewhat over one-half ours. Aggregate German munitions production in 1944, thus, seems to have amounted to about 40 per cent of that of the United States. The figures on munitions expenditures tend to confirm this

estimate if the munitions purchasing power of the Reichsmark was somewhat above its prewar exchange rate of \$0.40.

For Japan recourse must still be had to rough estimates of munitions expenditures. They indicate that Japan's munitions production in 1944 was less than one-fifth of our own. As yet hardly any reliable quantitative data have been published that could be used as a check except for aircraft. The 28,000 planes the Japanese turned out in 1944 represented over one-quarter of the number produced in the United States. However, taking account of the considerably lower weight of the average Japanese plane this would be equivalent to not more than 15 to 20 per cent of our own aircraft production. Naval construction in Japanese yards can hardly have exceeded one-sixth of our 3.3 million tons and it is to be doubted that the ratio was even as favorable as that to Japan in ground army equipment.

The relative magnitude of the major belligerents' munitions production in 1944, then, was roughly as follows:

United States		100
Germany	about	40
USSR	over	35
United Kingdom	about	25
Japan	about	15
Canada	less than	5

All other countries, belligerent or neutral, may safely be left out of account. Their aggregate output of combat munitions probably did not add up to 5 per cent of that of the United States alone.

III

It is interesting to compare the structure of the armament production of the major belligerents, i.e., the proportion in which their total munitions expenditures—and hence their total war production—was divided between ground army equipment, naval ships,

and aircraft, including in the latter two categories the ordnance and communication equipment used by ships and planes.

In the United States in 1944 over two-fifths of the total outlay on munitions went for aircraft, slightly less than one-third for naval ships, and the smallest amount, hardly one-quarter of the total, for ground army equipment. In Great Britain the share of naval ships was much smaller—about one-sixth—notwithstanding the usual association of the United Kingdom with the idea of the naval power "par excellence." The share of aircraft in the munitions production effort was slightly larger in Great Britain than in the United States, and that of ground army equipment was considerably larger, amounting to over one-third of the total. The emphasis on ground army equipment was of course strongest in the case of the two Continental belligerents, USSR and Germany. Both applied nearly three-fifths of their total munitions production effort to ground army equipment and most of the rest to the air force. Japan devoted a larger proportion of its meager resources to the Navy (excluding naval aircraft) —apparently well over one-third—than any of the other major belligerents, somewhat less to aircraft and considerably less to ground army equipment, probably not more than one-fifth of the total. Her emphasis on naval ships thus was considerably more pronounced than in Britain. This difference between the two island empires reflects to a good extent the fact that Japan had to fight her own war while Great Britain was a partner in an effective coalition in which the bulk of the naval shipbuilding effort was undertaken by another member.

IV

The annual indices of munitions production presented in Table 1 clearly indicate the often divergent paths over which each of the six major belligerents reached the 1944 level

of output. The more revealing monthly indices are as yet available only for the United States and Germany.

TABLE 1
TREND OF COMBAT MUNITIONS PRODUCTION OF
MAJOR BELLIGERENTS
1944 = 100

Country	1938	1939	1940	1941	1942	1943	1944
United States	2	2	5	11	47	91	100
Canada	0	2	6	27	73	102	100
Great Britain	4	10	34	59	83	100	100
USSR	12	20	30	53	71	87	100
Germany	16	20	35	35	51	80	100
Japan	8	10	16	32	49	72	100

United States figures for 1940 through 1944 are based on the War Production Board's War Production Index (*Facts for Industry*, Series 51-3-4). The index for "Total Munitions" has been adjusted to a combat munitions basis by excluding merchant vessels and motor vehicles. The figures for 1938-39 are linked to the above series on the basis of estimated munitions expenditures.

Canadian figures represent the official evaluation of war production (*Canada at War*, No. 45, p. 79). The categories of merchant vessels, mechanical transports, and miscellaneous military stores have been excluded to reduce the figures to a combat munitions basis. Since only an aggregate figure is given for production for the two years 1939-40 it has been assumed that 90 per cent of the total is attributable to the year 1940.

United Kingdom figures for 1940 to 1944 are based on the quantity of important weapons produced, published in the White Paper: *Statistics Relating to the War Effort of the United Kingdom* (Cmd. 6564, November 1944). Production for the entire year 1944 has been assumed equal to twice that for the period January-June covered in the White Paper. The index used is an average of that for (a) structure weight of new aircraft, (b) tonnage of naval construction, (c) the median of the indexes for 18 ground army equipment items. The figures for 1938-1939 are linked to this series on the basis of estimated munitions expenditures derived from budgetary data.

Figures for the USSR are derived from published figures on total defense expenditures and scattered information of expenditures on nonmunitions items. They are then adjusted on the assumption of a slight downward trend in munitions prices.

For Germany the official index of the production of combat munitions, as published in the reports of the United States Strategic Bombing Survey has been used from 1940 through 1944. Figures for 1938 and 1939 are linked on the basis of estimated munitions expenditures.

The Japanese figures are based throughout on estimated expenditures for combat munitions, derived from official figures for total government expenditures and scattered information on nonmunitions expenditures.

The shape of the United States munitions production curve has by now become familiar to all. First, a steady though moderate increase from almost nothing in mid-1940, except for naval construction, to a level in December 1941 of about one-fifth the later peak. Then a tremendous acceleration, almost without interruption, during the following two years, culminating in the fall of 1943. Finally a continuation at about the peak level until V-E Day, reflecting deliberate limitation of aggregate munitions output to conform to strategic plans, not impossibility or even difficulty of further expansion. The result is an S-shaped curve resembling the typical growth curve established by statisticians for many biological and economic processes.

Canada's munitions production curve, as may be expected, is quite similar to that for the United States. The main difference, an earlier start of the sharp rise and an earlier attainment of the top level, reflect the Dominion's earlier participation in active hostilities.

With the United Kingdom we reach a different type of curve. The substantial increase in munitions production started here as far back as 1938; the most rapid acceleration occurred in 1940 and 1941; the top level of production was approached late in 1942—a year earlier than in the United States; and all indications point to the beginning of a definite decline in munitions output—reflecting labor shortages in the war industries—from the middle of 1944 on. This is the picture of an economy fairly rapidly mobilized for maximum war production once hostilities started, but showing in the later phases of the war the effects of an attempt to mitigate overstrain and to prevent economic exhaustion.

The USSR curve shows still another picture. Here munitions production had reached substantial proportions—compared to later

peak levels—as far back as 1938 and continued to expand continuously and fairly rapidly all through the period of neutrality. As a result, the USSR, at the time the country was attacked, already turned out about half as many combat munitions as during 1944 and had accumulated a very substantial stock of reasonably modern weapons. The increase in output during the period of actual hostilities seems to have been rather slow but steady, no doubt reflecting the difficulties caused by the shift of production to the east. Differing from American and British experience, the expansion apparently continued right to or close to V-E Day. In contrast to the steep United States and the gentler United Kingdom S-curve of munitions production, that of the USSR thus more nearly approximates a moderately inclined straight line.

In many respects the most remarkable curve is the German one. Munitions production attained a substantial scale as far back as 1936, well before this happened in any other country, even the USSR lagging one to two years behind. Contrary to the trend in the United States, the United Kingdom, and Canada, the increase in munitions production after the start of hostilities was quite slow. It seems to have taken Germany almost three years—i.e., to early in 1942—to raise munitions production to twice the mid-1939 level, although it was during this period that she obtained possession of the substantial industrial resources of France, the Low Countries, Czechoslovakia, and western Poland. That this deliberately slow expansion of munitions production, amounting to a virtual levelling during most of 1941, was the greatest blunder Germany made in the sphere of war economics, and the one that cost her every chance of victory, is now clear. What is responsible for it, however, remains a matter of speculation. A complete misestimation of Soviet

munitions production is certain to have been an important factor in this fateful decision. The startling phase of German munitions production begins in the spring of 1942 and coincides with the advent of Speer. From early in 1942 to the middle of 1944, total German munitions production increased by leaps and bounds and with only a few interruptions, notably in the fall of 1942 and from mid-1943 to the beginning of 1944. When the invasion started and Germany was on the defensive on all fronts, her industries were turning out three times as many combat munitions as they had at the height of her military power in the fall of 1941 when the Third Reich controlled Europe from the Pyrenees to the Volga. That they could do so is proof how far Germany was from being totally mobilized before Stalingrad, much as her propagandists had been mouthing this term for years. Such a performance might have stemmed or turned the tide earlier. It might represent a tremendous achievement for a country five years at war and under continuous large-scale air attacks. But by mid-1944 even this effort was too little and too late, for the giant from across the ocean had hit his stride. From the fall of 1944 on German munitions production declined, slowly at first but precipitously after January 1945, under the influence of traffic difficulties, damage to war plants, absenteeism and decline in labor productivity reflecting the air war's impact on civilians, and general industrial exhaustion. Nevertheless, total munitions production for 1944 was about 25 per cent above the previous year's, an increase greater than that achieved by any of Germany's enemies. The curve of German munitions production thus is characterized by a period of long, slow, and steady rise during the years when Germany could afford to set the pace (1937-1941), followed by a short and sharp increase from early 1942 to mid-

1944, when her enemies forced her hand at every turn, and a still shorter and more precipitous decline while the Third Reich collapsed.

Japan's munitions production curve resembles that of Germany in many respects. As in Germany, munitions output reached a quite substantial level fairly early, in this case in 1938-1939. However, the increase was slower in the interval between the start of the China incident and the outbreak of World War II than in the two years between the invasion of Poland and the attack on Pearl Harbor. Again as in Germany, the largest absolute increases in munitions production occurred in 1943 and 1944 when it became clear that original plans for swift surprise campaigns had miscarried and that the war was developing into a battle of production and a contest of endurance. By the end of 1944 the peak of production had probably been reached, and further increases could hardly be expected in the face of increasing bomb damage and of the interdiction of imported raw material supplies by American sea and air forces.

V

A combination of (a) the indices of the trend of munitions production in each country shown in Table 1, (b) the estimates of the relative level of munitions output in 1944 discussed in section II, and (c) the 1944 value of munitions production in the United States (\$42 billion), yields a series of figures expressing the volume of munitions production of the six major belligerents in comparable units, viz., in United States munitions prices of 1944. These figures are shown in Table 2 rounded to full or half billions to avoid a spurious impression of accuracy. So far as statistics are able to give a summary picture of World War II, it is here.

TABLE 2

VOLUME OF COMBAT MUNITIONS PRODUCTION OF
MAJOR BELLIGERENTS

Billions of Dollars, 1944 U. S. Munitions Prices

Country	1935-39	1940	1941	1942	1943	1944
United States	1½	1½	4½	20	38	42
Canada	0	0	½	1	1½	1½
Great Britain	2½	3½	6½	9	11	11
USSR	8	5	8½	11½	14	16
Germany	12	6	6	8½	13½	17
Japan	2	1	2	3	4½	6

The figures of munitions production answer, first of all, much that has puzzled observers about Germany's role in the war. Before 1940 Germany was the only large-scale producer of munitions outside the USSR. By that time her current and accumulated output of modern ground and air equipment was so far in excess of that of her then adversaries that the blitz campaigns of Poland and western Europe lose much of their mystery. But more significant and less commonly realized is how small, measured by the standards of 1944, the munitions output was that supported these exploits which stunned the world. All the equipment that Germany turned out from the day she began to rearm in earnest to the day her armies crossed the Polish frontier was well below what Germany herself was later to produce in a single year, and amounted to not much more than what American factories delivered in every single quarter of 1943 and 1944.

The figures also furnish an explanation, and possibly the most important one, of Russia's successful defense and her later victorious advance into Germany. At the time of Germany's attack on the USSR her accumulated munitions production, increased by the booty of her previous campaigns, may have been one and one-half times as large as that of the USSR. However, Germany's matériel superiority on the eastern front must have been small since a considerable part of the total had to be assigned to the west.

What was much more ominous for Germany was her inability to outproduce the Soviet Union once the attempt at speedy victory had failed largely due to inadequate reserves of matériel. In each of the years 1942, 1943, and 1944 the USSR actually seems to have produced nearly as many munitions as Germany. Since Germany had to allocate a growing proportion of her output to the western theatre of war while the USSR received substantial aid from her allies—not, however, exceeding about one-tenth of her own munitions production—the Soviets during most of the war had at their disposal not only more men, but also more weapons, and the gap widened as the war continued. In 1944 Russian munitions production, plus lend-lease receipts, must have been at least 50 per cent above what Germany could spare out of current output for the eastern front. The course of operations reflects this changing relationship with fair accuracy, by accident or otherwise.

The rapid success of the invasion of the Continent in 1944 finds its counterpart among these figures in the massive preponderance of the cumulated and current production of munitions in the hands of the attacking forces. The United States, the United Kingdom, and Canada in the eighteen months preceding the invasion and during the first six months after its start produced over \$60 billion of munitions if it is assumed that slightly over one-half of the American and about four-fifths of British and Canadian armaments output was destined for the European theater. Germany and her satellites on the other hand during that period only turned out less than \$15 billion for use on the western front, if total output be apportioned on the basis of estimated troop strength each year on the two fronts. The Allies' advantage thus was of the order of 5 to 1, a figure that may help

to explain the relatively short duration of operations in the west.

Another striking feature of the table is the clear indication of Japan's basic inferiority and hence the temporary character of any success she might have scored. At the time of Pearl Harbor, Japan's production of munitions may have been substantial compared to that available to her enemies for the Pacific war. Already in 1942, however, the United States produced about twice as many combat munitions for use in the Pacific as Japan and increased that lead in 1943 and 1944. After the defeat of Germany the quantitative superiority of the United Nations, of course, became so crushing that A-bombs were hardly needed to convince the Japanese government of the wisdom of surrender. In 1945-46 the United States and United Kingdom alone would have turned out, under the production programs then in force, over six times as much combat munitions as Japan could. Participation of USSR in the Pacific war would have raised the ratio to well beyond eight to one.

VI

The figures on munitions production of the six major belligerents may possibly become more vivid when rearranged into total munitions expenditures by the opposing forces in each of the three major theaters of war; western Europe (including North Africa and the Near East), eastern Europe, and the Pacific.

The United Nations from 1935 through V-E Day produced about \$180 billion of munitions for use in the European theater of war. This estimate is based on the assumption that slightly over 50 per cent of the total combat munitions production of the United States, fully 75 per cent of that of the British Empire, and about 95 per cent of that of the USSR was destined for the European theater. There is some statistical founda-

tion for the American and British ratios, while that for the USSR is only conjecture. Germany (including satellites and occupied countries) during the same period is estimated to have produced about \$90 billion worth of munitions, all for use in the European theater.

The United Nations in their successful endeavor to force Germany and her satellites to unconditional surrender produced in the aggregate about twice as many munitions as their enemies. If allowance is made for the stocks of munitions produced for the European theater but still unused when the war in Europe ended, the ratio of munitions expended by the United Nations in winning an overwhelming victory over Germany and Italy is probably not much over $1\frac{1}{2}$ times the munitions used by the European Axis in a vain attempt first to win the war and then to stave off defeat. The startlingly small superiority in combat munitions expended by the victorious coalition is partly explained by the huge and cumulating losses of matériel suffered by an army in retreat, and by the rapid obsolescence of weapons, which offset much of the initial advantage gained by the Axis in stepping up its munitions production much earlier than most of the United Nations did.

The degree of matériel superiority of the United Nations in the European theater was, however, altogether different on its two main fronts. If we allocate German munitions production between the two fronts on the basis of estimated troop strength and allow for American and British aid to the USSR, it would seem that the Germans produced over \$50 billion of munitions for use on the eastern front, while the Russians for the period as a whole had at their disposal a total combat munitions output of about \$60 billion. The ratio of the victor's munitions supply to that of the vanquished on the eastern front then was not much in excess of

unity. The United States and the British Empire, on the other hand, produced well over \$100 billion worth of munitions (excluding those supplied to the USSR) for use against the German and, incidentally, the Italian armed forces. The European Axis had only about \$40 billion of munitions to oppose this avalanche. Thus, on the western front, the ratio of the victor's supply of combat munitions to that of the vanquished was about $2\frac{1}{2}$ to 1. This great difference between the ratio of matériel available to winner and loser on the two fronts is partly explained by the necessity of overcoming, generally by amphibious operations, the fixed defenses existing in large sectors of the western front, but in turn it also helps to explain the much shorter duration of operations in the west.

Interestingly enough, the United Nations' superiority in military effectives was not much different from that in matériel. In the summer of 1944, when the last decisive phase of the European war began, the United Nations had about 16 million men in the European theater, including $2\frac{1}{2}$ million Americans, fully 4 million men from the British Empire, and, it may be estimated, 9 million men from the USSR. Against them Germany and her remaining satellites at that time could muster only about 8 million men. The Allies' manpower superiority thus was about 2 to 1, a superiority not quite as marked but not much lower either, in the aggregate, than that then prevailing in the current output of combat munitions. In military manpower, however, as in matériel, the Allies' superiority was much more pronounced on the western front, with a ratio of about $2\frac{1}{2}$ to 1, than on the eastern front, where it probably was not much in excess of $1\frac{1}{2}$ to 1.

Finally, consideration may be given to casualties (dead and missing, presumed dead), the parallel in the human sphere to munitions

expended. The western Allies lost less than one-half million men in the European theater. Russian losses apparently were near 6 million men excluding civilian casualties. Germany is estimated to have lost about 4 million men—although official German figures are considerably lower—while Italian and other satellite losses were well below $\frac{1}{2}$ million. On the basis of these admittedly rough figures the ratio of military casualties between the victorious United Nations and the vanquished European Axis powers comes to about $1\frac{1}{2}$ to 1, probably not much below the ratio of munitions used.

A sharp difference is again apparent in the relation between the matériel expenditure ratio and the casualty ratio on the western and the eastern fronts. The victorious Allies probably produced almost $2\frac{1}{2}$ times as much matériel for use on the western front as the Germans and Italians, and their casualties were somewhat higher than those of the losers as the Allies were on the offensive most of the time. In contrast to this, the Russians, though ultimately victorious, lost more men than their enemies, partly as a result of their very large casualties in the first phase of the war, when the Germans were advancing, and because of the high toll of death among prisoners of war. Thus, on the western front, victory was achieved to a large extent through the United Nations' use of vastly more matériel than the Axis was able to provide. On the eastern front the advantage also lay always with the forces disposing of the larger quantities of matériel—up to 1942 the Germans, thereafter the Russians—even though the matériel superiority on neither side ever approached that prevailing in the West. For that reason, the Russians' ability and willingness to expend military manpower on a lavish scale was of particular importance for the final outcome in the east.

For the Pacific theater of war the United Nations had available about \$70 billion of munitions, of which the United States contributed at least four-fifths. Total Japanese munitions production from 1935 through the middle of 1945 amounted to not much over \$20 billion. This heavy matériel superiority of the United Nations, however, existed only after 1943, particularly after the United States had occupied enough forward bases and built enough merchant ships to deliver a large proportion of its current munitions production to the Pacific theater. Up to late 1942, the Japanese probably had at their disposal more armaments than the American forces. This fact puts in the right light our performance of stopping the Japanese advance as early as mid-1942, greatly helped by the enemy's dispersal of his forces and his equipment.

The United Nations never possessed a comparable manpower superiority in the Pacific theater. Early in 1945 there were about 4 million American troops in the Pacific, including naval forces operating in that ocean, while the British Empire may have had another million troops in the immediate theater of war, excluding forces in British India. Japanese strength in the same theater at this time can hardly have been in excess of 4 million men since about 2 million men were engaged in fighting Chinese troops. Japanese casualties, on the other hand, were very much higher than those suffered by the United Nations. Our own losses in the Pacific theater of war were not in excess of 150,000 men. Losses of Great Britain, the Dominions, British India, and the Netherlands should have increased the total to well over 200,000. There is no reliable figure of aggregate Japanese losses. American military authorities have estimated them at slightly over 1,000,000 outside of China, or four to five times Allied losses. Even if this figure should turn out to be exaggerated the disproportion

remains striking until it is related to a similar disproportion in the amount of munitions used.

VII

The statistics of munitions production confront the economist with three basic questions:

(1) How long did it take to reach full mobilization for munitions production?

(2) What economic factors explain the great differences in the absolute and relative level of munitions production in 1944?

(3) How long could production at the 1944 levels have been continued and how far could it have been exceeded?

The first question is the easiest to answer. In the United States it took about two years and one-half—from the middle of 1940 to late in 1943—to increase munitions production from rudimentary beginnings to nearly the maximum level reached during the war. The interval was not much longer in the United Kingdom and Canada, large-scale munitions production starting late in 1939 and practically hitting its final stride by mid-1943. That Germany and Japan took much more time to reach their maximum output is due less to the impossibility of more rapid mobilization—both managed to double combat munitions production from already substantial levels within two years when they realized the need—than to a basic mistake in planning, an underestimation of the quantities of munitions needed. The equal slowness of the USSR in working up to its top level of munitions production, on the other hand, is probably attributable to the fact that hostilities started when munitions production was already high and to the delays caused by the loss of the main industrial regions and the necessity of shifting production to the east. We may, therefore, conclude that under present conditions in the absence of direct interference by the enemy it takes not more than two years to

convert industry fully from peace to war production even if only few preparations are made in advance.

The second question, too, permits of a fairly simple answer. The munitions production of the major belligerents at full mobilization was roughly proportional to the size of their prewar industrial labor force combined with the prewar level of productivity in industry. This is hardly an astonishing result, but one which confirms the belief that basic economic factors rather than accidental developments or sudden changes in elementary economic relationships—more familiar under the names of "secret weapons" and "miracles of production"—have determined the course of munitions production.

The United States in 1940 had a non-agricultural labor force of nearly 45 million compared to one of about 35 million in USSR, nearly 30 million in Germany, and slightly over 20 million in the United Kingdom and Japan. The distance separating the United States from the other major countries, therefore, was not very large. The United States' lead in productivity, on the other hand, was vast, as Table 3 shows. Prewar output per manhour in United States manufacturing industries has been calculated at over two and one-half the British, Russian, or German level and as being about four times as high as in Japan. From these basic relationships we would expect United States munitions production to have been at about three times the German and Soviet level, at about five times the British and at about eight times the Japanese level. In fact, the superiority of the United States seems to have been somewhat, although not much, smaller than these crude calculations indicate. One reason is that throughout the war the United States could afford to keep a larger fraction of its industry to supply civilian needs. A second reason is the relatively high level of output in the United States, compared to

other belligerents, of noncombat munitions, particularly merchant ships and automotive vehicles. Another is the fact that in the munitions industries some other countries were not quite as much behind American efficiency as they had been in peacetime manufacturing, probably because war production put them for the first time on the mass production basis common in the United States. A fourth reason applying to Germany only is the abnormal expansion of the labor force through use of foreign workers.

TABLE 3

PREWAR AND WARTIME PRODUCTIVITY IN MAJOR BELLIGERENT COUNTRIES

Production per Manhour in U. S. = 100

Country	Pre-War (1935-38)	War (1944)
	All Manufactur- ing Industries	Munitions Industries
United States	100	100
Canada	71	57
Great Britain	36	41
USSR	36	39
Germany	41	48
Japan	25	17

The prewar figures are taken from War Production Board Release TP-178.

The 1944 data are rough estimates based on the figures for total combat munitions production given in Table 2 (increased by estimates of merchant vessels and motor vehicles), number of workers in the metal and basic chemical industries, and average hours per week. The data on number of workers and hours are taken from official sources for United States, Canada, and the United Kingdom, but based on rough estimates only for the USSR, Germany, and Japan.

Though any answer to the third question must be speculative, one can be given with some confidence. There is hardly any doubt that even in 1944 there was still a considerable amount of slack in the American economy. Munitions production could have been increased within a relatively short time by another 10 to 20 per cent through some curtailment of civilian consumption even if only down to the prewar level, through a labor draft, and through a tighter control over the efficiency of munitions production. Even

then undermaintenance and overuse of equipment would not have been such that the increased level of output could not have been maintained for several years, at least from the economic point of view. A similar reserve may have existed in Canada. The other major belligerents, on the other hand, seem to have put forth in 1944 the maximum sustained effort of which they were capable. In their case munitions production was not susceptible of a significant further increase. Indeed, Great Britain was showing signs of an impending serious drop in production and Germany probably was producing munitions in 1944 at a rate that could not be sustained even if air raid damage had not increased beyond the then prevailing rate. The conclusion, therefore, is that at equally full mobilization of resources the United States would have shown an even greater preponderance in munitions production over its allies and enemies than it had in fact attained in 1944.

VIII

To stress, as has been done here, the quantitative and economic factor of munitions production does not mean to ignore or belittle the other elements of warfare. Still less does it constitute an endorsement of the thesis, beloved by many economic and financial writers before the war, that the United States, the British Empire, and the western European countries were bound to win in a war with Germany or Japan because of their higher economic potential. History has shown how close the free world came to losing, notwithstanding its economic advantages. It may well be the verdict that

Germany failed to win the war, or to force a settlement by stalemate, mainly because of the underutilization of its armaments industry before 1943-44 and that this error in planning was traceable largely to such unexciting facts as the underestimation of Soviet munitions production by German intelligence and the German staff's failure to calculate correctly, in the early stages of rearmament, the matériel requirements of an invasion of the United Kingdom.

The point made is, quite on the contrary, that what determined, or at least decisively influenced, the course of World War II, is the actual volume of munitions production—or more correctly the level of munitions deliveries to the theaters of operations—not any vague economic potential. This statement is not enunciated as a rule that necessarily applies to past wars—or even only to those fought after the Industrial Revolution—or one that would govern future wars. It is, however, regarded as valid for this war because there was this time no very great difference among the main belligerents—at least after 1940—in the quality of generalship, in the training, morale, and stamina of officers and troops, and in the quality of equipment. The absence of wide differences in the general level of the quality of equipment is particularly significant because it strengthens the importance of the volume of munitions production. Indeed, as much as it may be contrary to popular ideas, none of the "secret weapons" of World War II was as effective in giving an advantage in actual combat as much less spectacular differences in equipment in previous wars had been.

Headquarters Gazette

GENERAL DEVERS' ADDRESSES AMI

General Jacob L. Devers, Commanding General, Army Ground Forces, spoke concerning "Operation ANVIL" (the invasion of Southern France) before a meeting of the American Military Institute at the National Archives on May 27. General Devers was formerly Deputy Commander of the Mediterranean Theater of Operations and assumed command of the 6th Army Group at its formation in September 1944, after Allied troops had swept up the valley of the Rhone in Operation ANVIL. The combined forces under General Devers' leadership (later redesignated the Southern Group of Armies) accomplished the invasion of southern Germany, crossing the Rhine in March 1945, and securing the unconditional surrender of all German forces in Austria on 6 May 1945. General Devers' address will be published in the next issue of *Military Affairs*.



LT. GEN. W. H. SIMPSON

REORGANIZATION OF THE WAR DEPARTMENT AND OF THE ARMY

As this number of *Military Affairs* goes to press, the War Department still buzzes with the excitement of its major reorganization of June 11. A War Department announcement points out that the studies which led to the reorganization were undertaken at the end of hostilities last summer by a board of officers, at first headed by the late Lieutenant General Alexander M. Patch, and subsequently reconstituted under the presidency of Lieutenant General W. H. Simpson. The aim of the Simpson Board,

as announced, was to provide a simpler and more flexible organization, with clear-cut command channels, to satisfy the requirements of economy and efficiency. The new plan requires a minimum of individuals to report directly to the Chief of Staff or his deputy. It provides more adequate means for the conduct of a significant research and development program, for intelligence and counter-intelligence activities, and for the elimination of duplication in activities. In the allocation of functions it pursues and encourages an aggressive application of the principle of decentralization. A few details of the reorganization follow, as they affect the elaborate

organizational hierarchy that prevailed during the war.

The Secretary of War

In addition to exercising overall direction of the War Department the Secretary of War will supervise and direct research and development activities. To this end he will be assisted by an Advisory Board of leading scientists, technicians, and industrialists to assure contact with civilian establishments engaged in such activities. (It should be added that, on the military side, a research and development division on the general staff level will operate directly under the Chief of Staff.)

The Chief of Staff

The duties and authority of the Chief of Staff have been broadened and made more specific; in addition to his responsibilities as principal military adviser to the Secretary of War and to the President, the Chief of Staff is now more clearly placed in overall command of the Army field forces and related supply and service establishments. The organization of his office and that of the Deputy Chief of Staff is presumably to remain much the same as at the present time except that provision has been made for a small Advisory Group, to consist of such personnel as the Chief of Staff may determine.

The War Department General Staff

The authority of the War Department General Staff in directing military operations, under the coordination of the Chief of Staff, has now been strengthened. To this end each division will no longer be headed by an Assistant Chief of Staff, but by a Director, with functions similar to those of his predecessor, but with more authority and responsibilities. Each director has been granted the authority to plan, direct, and supervise the execution of operations within his sphere of action, while the authority to conduct opera-

tions is rigorously decentralized to the appropriate command or service.

The Assistant Chief of Staff (G-1) is replaced by the Director of Personnel and Administration in the new set-up, with Major General Willard S. Paul remaining in that position. In addition to discharging his responsibilities as personnel manager of the War Department, including overall direction of procurement, allocation, and demobilization of personnel, General Paul must coordinate the activities of the administrative services within his field of responsibility: The Adjutant General's Department, The Judge Advocate General's Department, the Corps of Chaplains, the Office of the Provost Marshal General, the Special Services Division, and such temporary boards and committees as now perform personnel functions.

The Director of Intelligence replaces the Assistant Chief of Staff for Intelligence (G-2); and Major General Stephen J. Chamberlin succeeds Lieutenant General Hoyt S. Vandenberg in the new capacity, with overall War Department responsibility for the collection, evaluation, and dissemination of intelligence. General Chamberlin will supervise the Military Intelligence Service and the Army Security Agency and Army participation in propaganda and psychological warfare.

The Director of Organization and Training replaces the Assistant Chief of Staff for Organization and Training (G-3), with little essential change in functions and responsibilities. These cover the making of studies of the organization of the War Department and the Army, mobilization and demobilization of the Army, the prescription of training objectives, the formulation of training policies, and the coordination and inspection of training installations and activities, especially those of the Army school system. Acting Director of Organization and Training is Brigadier General George L. Eberle.

Lieutenant General LeRoy Lutes becomes the Director of Service, Supply, and Procurement. In addition to the duties and responsibilities of Assistant Chief of Staff for Supply (G-4), General Lutes also retains many of the functions in connection with service, supply, and procurement with which he had been charged as Commanding General, Army Service Forces. He also assumes responsibility for functions heretofore assigned to the Logistics Group, Operations Division, of the War Department General Staff. He is charged with developing logistical plans for the Army; he will supervise and coordinate the service, supply, and procurement activities of the Corps of Engineers, the Medical Department, Signal Corps, Ordnance Department, Quartermaster Corps, Finance Department, and Chemical Warfare Service.

The Director of Plans and Operations supersedes the Assistant Chief of Staff for Operations (OPD), with Lieutenant General John E. Hull replaced in the job by Major General Lauris Norstad. He is responsible for the formulation and development of strategic and operational plans and for assisting the Chief of Staff in the strategic direction of the Army forces.

In the reorganization the Research and Development Division, primarily concerned with the military aspects of scientific advances, becomes a division of the War Department General Staff, absorbing the New Developments Division, which operated on the War Department Special Staff under the old organization.

The War Department Special Staff

Special activities which because of their scope should report directly to the Deputy Chief of Staff are provided for at the level of the War Department Special Staff. The National Guard Bureau, the Executive for Reserve and R.O.T.C. Affairs, The Inspector

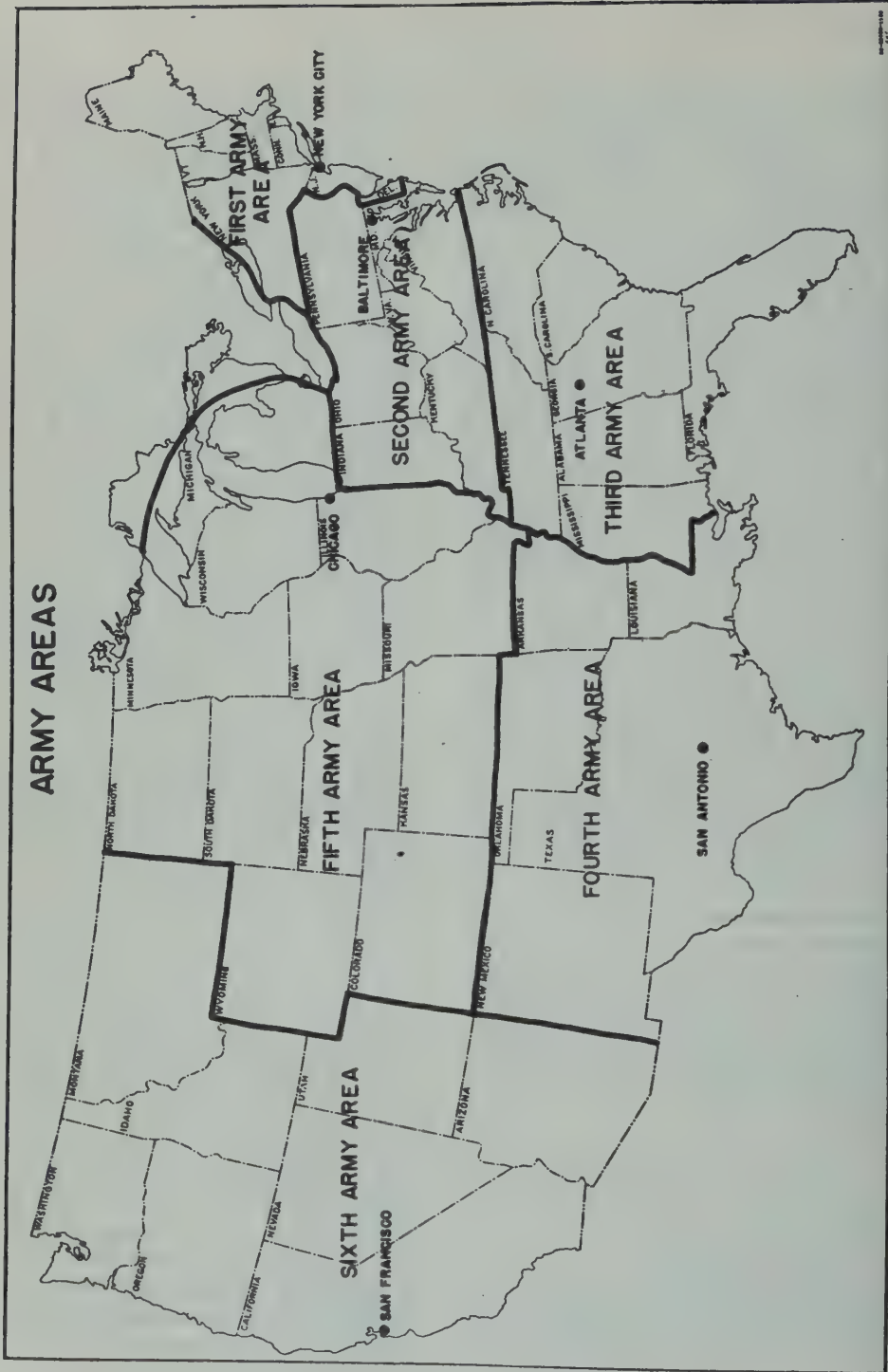
General, the Budget Division and Budget Officer for the War Department, the Civil Affairs Division, the Historical Division, and the War Department Manpower Board are included as units of the Special Staff, with duties and functions, in general, unchanged.

Army Service Forces Out

The headquarters of the Army Service Forces is discontinued. The duties and functions of the Technical and Administrative Services, which operated under its control during the war period, remain in general unchanged, but will be supervised and coordinated by appropriate War Department general and special staff divisions, each in its field of responsibility. The nine service commands, as such, are discontinued and their functions are transferred to six armies, each allocated to an army area (see map).

Army Ground Forces and Army Areas

General Jacob L. Devers, in remaining as head of the Army Ground Forces, assumes overall direction of the six armies in the continental United States. Veteran combat generals have been designated to command these six armies and to head the corresponding six army areas which replace the nine service commands. General Courtney H. Hodges will command the First Army and the First Army Area with headquarters in New York City. Lieutenant General William H. Simpson will command the Second Army and the Second Army Area with headquarters in Baltimore. Lieutenant General Oscar W. Griswold will command the Seventh Army (the Third Army remains on occupation duty in Europe) and the Third Army Area with headquarters at Atlanta. General Jonathan Wainwright will command the Fourth Army and the Fourth Army Area with headquarters at San Antonio. Lieutenant General Walton H. Walker will command the Fifth Army



and the Fifth Army Area with headquarters at Chicago. And General Joseph W. Stilwell will command the Sixth Army and the Sixth Army Area with headquarters at San Francisco. The authority of each of these army commanders will extend to all units and posts within his army area, except Air Forces establishments and certain other exempted installations.

Greater Independence for Army Air Forces

The War Department has announced, in connection with the reorganization, that "The Army Air Forces must be provided with the maximum degree of autonomy permitted by law without permitting the creation of unwarranted duplication in the functions of service, supply, and administration." Such increase in the independence of the Air Forces is designed to prepare for the changes which may be required in the event that a single department of the armed services is later established, with the Air Forces detached from, and placed on a par with, the Army. The major subordinate commands authorized under the Headquarters, Army Air Forces, commanded by General Carl Spaatz, include: The Strategic Air Command at Andrews Field, Maryland, headed by General George C. Kenny; the Tactical Air Command at Langley Field, Virginia, headed by Major General Elwood R. Quesada; the Air Defense Command at Mitchel Field, New York, headed by Lieutenant General George E. Stratemeyer; the Air Transport Command, at Washington, under Lieutenant General Harold L. George; the Air Matériel Command at Wright Field, Ohio, under Lieutenant General Nathan F. Twining; the Air University at Maxwell Field, Alabama, under Major General Muir S. Fairchild; and the Training Command, at Barksdale Field, Louisiana, under Lieutenant General John K. Cannon. Six air defense areas are also authorized, with headquarters

in the vicinity of the various army area headquarters already mentioned.

RESEARCH AND DEVELOPMENT IN THE GENERAL STAFF

In announcing the establishment of a Research and Development Division of the War Department General Staff the War Department has emphasized the necessity for coordinating Army research with the activities of industry and civilian research institutions. It has been made a primary interest of the new division to encourage the application of national scientific resources to the solution of military problems; the director of the division, Major General Henry S. Aurand, will provide liaison between Army planning chiefs on the one hand and the universities and research laboratories on the other. From time to time the War Department will submit to industrial and scientific experts broad technological problems for solution along lines which civilian organizations have found most conducive to productivity. "The Army must have civilian assistance in military planning as well as for the production of weapons," states General Eisenhower's directive on the formation of the division. Other general policies in connection therewith were indicated: that "scientists and industrialists must be given the greatest possible freedom to carry out their research;" that the "possibilities of utilizing some of our industrial and technological resources as organic parts of our military structure in time of emergency should be carefully examined;" that "within the Army we must separate responsibility for research and development from the functions of procurement, purchase, storage, and distribution;" and that "officers of all arms and services must become fully aware of the advantages which the Army can derive from the close integration of civilian talent with military plans and developments."

Having been engaged in ordnance work from 1917 to 1940, General Aürand has acquired a wide background in Army research and development. Early in the war he assumed command of the Sixth Service Command; later he headed the Normandy Base Section in France, and then the China Theater Services of Supply.

PLANS FOR AIR ENGINEERING DEVELOPMENT CENTER

In his recent disclosure of the preliminary plan of the Army Air Forces for the construction of an Air Engineering Development Center, Major General Curtis E. LeMay, Deputy Chief of Air Staff for Research and Development, stressed the need for applying the results of current research and invention to the development of air weapons required by the Air Forces for national defense. Supersonic aircraft and missiles, the general indicated, head the list of defensive equipment proposed for development at the projected facility. Nuclear energy applications for the propulsion of such aircraft and missiles, or other atomic devices of the future, would constitute another main concern of the center. Other developments would include flight and survival equipment for operation above the atmosphere, space vehicles and space bases with all the devices for use therein, and new kinds of apparatus for control, detection, and destruction.

The plans for the development center propose facilities for experimentation in eight categories: fluid dynamics, thermodynamics, structure and materials, electronics and wave phenomena, physiology, fuels and propellants, instruments, and flight engineering. General LeMay estimates that by 1955, if present plans are implemented, the development center will have in its employ a force of approximately 4000 persons.

THE NATIONAL WAR COLLEGE

Shortly after the disaster at Pearl Harbor *Military Affairs* printed an editorial entitled "Challenge to Democracy" which in citing the nation's peril remarked that "Victory—indeed survival—will require out-thinking as well as out-building and out-fighting the Axis." The editorial added:

Our ultimate military potential can be achieved only as the meaning of total war becomes generally understood and as a comprehensive body of solid military thought is created. As a nation we stopped even thinking about war, except as something to avoid, at the end of the last one. We cannot simply pick up now where we left off then. We have twenty years—twenty years of intensive, constructive, daring thought on the part of our enemies—to catch up on before the American people can be expected to understand the ramifications and comprehensiveness of modern warfare and the parts they must play in it. . . . Solid military thought is not built upon the sudden interest of those untrained in the study of war. The economist who knows nothing of governmental organization, the political scientist who knows nothing of strategy, and the soldier who knows nothing of economics cannot be as capable of directing the war effort as the specialist who has learned the relationship of all of these things. As we have said before, "The study of war must be an *integral* field of study, not coordinate with any one or two already recognized studies, but coordinate with the sum total of *all* recognized studies." Some steps have been taken in this direction, but they are not sufficient. Some men are now learning by experience, but this is too slow. A College of National Defense is needed to develop specialists in war administration.

It appears that the new National War College (which stems directly from the Army and Navy Staff College) is an unprecedented step in that direction. Organized under the authority of the Joint Chiefs of Staff, it will constitute not only the highest level educational establishment of the armed forces but in fact the first ever established to promote close integration between the highest echelons

of the armed services and the State Department, for the joint study of national defense. The staff will comprise officers from the armed services and from the State Department, as well as civilian professors on loan from various American universities. The college will be located at the site of the now discontinued Army War College, in Washington. The first class is scheduled to begin September 3, 1946, and to continue until June 21, 1947, with an enrollment of at least one hundred students. The course of instruction will include studies on the atomic bomb and other new developments and their effect on the trend of warfare; studies of operations in World War II, with particular emphasis on the problems and techniques of the several theaters, the mistakes and the lessons learned; and studies of the foreign policies of the United States and other major powers, with special attention to the United Nations organization and to other means of preventing war.

Major home-front problems, such as industrial production, communication, transportation, and mobilization of manpower are to be the subjects of considerable research. In connection with drawing up a broadened curriculum a Board of Consultants has recently been conferring with Vice Admiral Harry W. Hill, USN, Commandant of the new college, and with Mr. Donald Russell, Assistant Secretary of State, and with the two deputies of the college, Major General Alfred M. Gruenther and Brigadier General T. H. Landon. The board consists of Dr. James P. Baxter, III, President of Williams College and a trustee of the American Military Institute; Dr. Calvin B. Hoover, Dean of the Graduate School of Duke University; Dr. William L. Langer of Harvard; Professor Arnold Wolfers of Yale; and Dr. Walter L. Wright of Princeton, retiring Chief Historian of the War Department.

EDWARD MEAD EARLE DECORATED

Professor Edward Mead Earle, of the Institute for Advanced Study at Princeton, has been awarded the Medal for Merit, the highest decoration available to a civilian for war service. The presentation was made on behalf of the President by General Carl Spaatz, Commanding General of the Army Air Forces, at a ceremony in the Pentagon Building in Washington on 13 May 1946. The award to Dr. Earle was for "extraordinary fidelity and exceptionally meritorious conduct" in the performance of duties for various government agencies, especially the Army Air Forces, both in the United States and overseas. The citation, signed by President Truman as Commander-in-Chief, enumerated the reasons for the award and concluded: "Through his untiring efforts and deep personal interest in the conduct of the War, Dr. Earle made exceptional contributions to his country's ultimate victory."

OFFICIAL WAR DEPARTMENT HISTORY, WORLD WAR II

The War Department has announced that its official history, to appear under the general title *War Department History of World War II*, will comprise a series of over a hundred volumes. It will include both administrative and operational history of the War Department and the Army: "narrative histories of major commands, technical services, overseas theaters, and other major agencies," each to be covered in separate series, with format standardized insofar as possible.

These publications will constitute the first comprehensive narrative of its operations that the Army has ever published after a war. It will be unrestricted in scope and detail except by the requirements of national security as they apply at the time of publication. Much of the work has already been done during the war by a corps of historians in

uniform working in every major command of the Army. Teams of them went to the scenes of action, and nine were killed or wounded in getting the information required. To finish the project, the active cooperation of civilian historians will be necessary. The Historical Division, WDSS, as now planned will contain a large number of these, and it is expected that besides getting out the history of the Army in the recent war, it will develop as a center of studies in military history and of historical training for the Army.

COLONEL GREENFIELD APPOINTED CHIEF HISTORIAN OF THE WAR DEPARTMENT

The War Department has announced that Lt. Col. Kent Roberts Greenfield, a trustee of the American Military Institute, has been appointed Chief Historian of the War Department. He will assume his new duties in September after his separation from the Army, in which he has served as Chief of the Historical Section, Army Ground Forces. In his new capacity he will succeed Dr. Walter L. Wright, formerly President of Roberts College, Istanbul, Turkey, who has been Chief Historian since 1943.

Author of studies in the history of modern Italy, Colonel Greenfield was Professor of Modern European History at Johns Hopkins University and Chairman of the Department of History from 1930 until he entered military service in 1942. As Chief Historian he will become the professional advisor to the Historical Division, War Department Special Staff, charged with publishing the comprehensive official history of the United States Army in World War II. The first volume of this history, written during the war by Colonel Greenfield and Dr. Robert R. Palmer, of Princeton University, is on its way to the press, with the title *Origins of the Army Ground Forces: GHQ, U.S.A., 1940-42*.

UNOFFICIAL UNIT HISTORIES, WORLD WAR II

Numerous Army units are now publishing unofficial histories for their members as mementos of their services during World War II. Many such histories have already appeared. Many are now in preparation, and it is believed that not a few of them will set a high standard of compilation and authorship, preserving details of achievements in the war that might otherwise have been lost. The War Department has therefore indicated its desire to encourage such publications as a definite contribution to the history of the war effort. To insure the fullest utilization of such material for the War Department Historical Program, or other official use, a uniform procedure has been prescribed for registration with the Historical Records Section, AGO, of all such unit histories, including both published titles and those in preparation for future publication or distribution. In addition, the Historical Records Section has been authorized to accumulate a reference collection of such unofficial histories, as complete as possible.

WAR DEPARTMENT HISTORICAL RECORDS IN RELATION TO ARMY TRAINING PROGRAM

On 10-12 April 1946 the Historical Division, War Department Special Staff, conducted a conference for representatives of the several Army service schools. Its purpose: to discuss the problems raised by the increased number of requests for reproductions of combat operations records and other historical materials on file in the War Department, for use in the training programs of the various service schools.

Major General E. F. Harding, Director of the Historical Division, opened and closed the sessions. Other speakers included Colonel Allen F. Clark, Jr., Deputy Director, Historical Division; Colonel John M. Kemper, also of the Historical Division; Colonel



KENT ROBERTS GREENFIELD

Clanton W. Williams, Chief Historian, Army Air Forces; Sherrod E. East, Archivist, War Department Records Branch, AGO; Major Daniel F. Noll, Microfilm Consultant for the War Department Records Administration Program; and Captain Thurman Wilkins, Chief, Historical Records Section, AGO. All mentioned above, incidentally, are active members of the Institute.

To meet the needs of the service schools for after-action reports and other historical materials held in the files of the War Department (principally, the Historical Records

Section, AGO), it has heretofore been necessary to reproduce large quantities of these documents, mainly by means of photostating. Discussion at the conference indicated the necessity of continuing reproduction on an ample scale; but it was determined that microfilming rather than photostating is a more practical and less expensive means of reproducing the desired source materials for the schools. It also appeared that a significant correlative adjunct of microfilm reproduction would be the opportunity to build up, as a result of specific requests for reproduction of

documents, a negative microfilm set of Historical Documents, World War II, from which future requests for such documents could be filled at little cost and without further recourse to the original records. Steps have been taken to institute, on an experimental basis, the means to accomplish this objective.

HISTORICAL SECTION, ARMY WAR COLLEGE,
TRANSFERRED TO HISTORICAL DIVISION,
WDSS

On 1 May 1946 the Historical Section of the Army War College was transferred to and consolidated with the Historical Division, War Department Special Staff. This section, formerly directed by Brig. Gen. Oliver L. Spaulding and now by Colonel Clarence C. Benson, will continue the preparation for publication of the documents of World War I. The new designation of the section is World War I Branch, Historical Division, WDSS.

For the benefit of those who have joined the American Military Institute only recently it should perhaps be recalled that in 1933, while he was Secretary of the Historical Section, Army War College, Colonel Benson took a leading part in bringing about the creation of the American Military History Foundation, later renamed the American Military Institute. It was his article on "American Military History," published in the *Infantry Journal* and several other service magazines in the spring of 1933, that drew forth widespread expressions of interest in having some form of organization to promote the study of military history and thereby encouraged a group of officers and civilians in Washington to proceed with the formation of such an organization. All those who "knew him when" are happy to know that he has returned to a position of leader-



COL. CLARENCE C. BENSON

ship in historical studies, where his energies and keenness of mind can count for so much.

PICTURE OF TRUSTEES AND OFFICERS

The promised group photograph of trustees and officers in attendance at the meeting of the Board of Trustees held on March 7, 1946, is reproduced in this issue. For those who are interested and for the record the persons included in the group may be identified as follows: *front row* (left to right): Dr. Stuart Portner, Dr. Robert G. Albion, Dr. Luther Evans, Brigadier General Donald Armstrong, Colonel Joseph I. Greene, Lieutenant Colonel Frederick P. Todd; *back row* (left to right): Captain Thurman S. Wilkins, Mr. George J. Stansfield, Major Maynard G. Moyer, Lieutenant Colonel Jesse S. Douglas, Dr. Troyer S. Anderson, Colonel Thomas M. Spaulding, Lieutenant Colonel Kent Roberts Greenfield, Mr. Leo Gerald, Dr. Dallas Irvine.



Trustees and officers of the American Military Institute in attendance at the meeting of the Board of Trustees held in the office of the Librarian of Congress, March 7, 1936.

WHY MILITARY AFFAIRS IS BEHIND SCHEDULE

It will be apparent from the appearance of this issue of our magazine that the editorial staff has been busy making some changes in line with the decision of the Board of Trustees, at its meeting of February 15, that the magazine should be improved and enlarged. Planning has taken time and enlargement has involved additional work for a staff that has only spare time to give to the magazine. The principal cause of delay, however, has been the loss of time involved in locating or selecting, procuring, and incorporating pictures to serve as illustrations. The inclusion of numerous illustrations is one of two things most needed for improvement of the magazine. The Editor has felt it to be essential at this juncture even if publication of several issues be delayed.

The other improvement that is needed is not so easy to accomplish. The top-flight writers on military and naval topics can sell their articles to magazines that pay good money for them. Naturally that is what most "name" writers do. *Military Affairs*, which cannot pay for contributions, can obtain articles by such writers only insofar as they are willing to give us something of appreciable monetary value out of a desire to further the purposes of such an organization as ours. What we need is plenty of money, which can only be forthcoming when the or-

ganization shows, beyond any doubt, that it deserves it.

LETTERS FROM MEMBERS

Among letters received that deserve publication in whole or in part is the following:

Gentlemen:

I enclose my check for three dollars (\$3.00) for membership dues for 1946. . . .

While I was The Adjutant General of Massachusetts with Lieutenant George C. Marshall, recently General of the Armies, we developed truck trains, shooting from planes, and various things of that nature which were far ahead of the then horse methods and the six-mule team of that date. . . .

If your magazine is broad minded enough to admit that the real fundamental question of national defense and attack, either on land, sea, or in the air, is the effect of such devices as the V or atomic bomb or something worse than that, and that mass bombardments [and] attacks by masses of foot fighters are obsolete and that producing the weapons, without ruining the country, is just as important as shooting it on the front line, I think you might help more the problem of national security, whether attack or defense, than to lay too much stress on the sad histories of unsuccessful campaigns such as the United States has had many times in the past. Trying to figure out the mistakes made in the Revolution, War of 1812, the Mexican, the Spanish-American, and the First World War is really not as important as getting the correct viewpoint of things as they are in 1946, not clouded by Army, Navy, or Air thinking. . . .

Gardner W. Pearson,
Lowell, Mass.

★ ★ ★ ★ ★ ★ ★ ★

Notes And Antiquities

THE ARCHIVE OFFICE OF THE WAR DEPARTMENT

*Repository of Captured Confederate Archives, 1865-1881**

BY DALLAS IRVINE

When the Union troops of Major General Godfrey Weitzel marched into the burning city of Richmond on the morning of April 3, 1865, the streets around Capitol Square were found deeply littered with papers that the Confederate government had dumped from its offices and attempted to burn.¹ Since quantities of Confederate records obviously remained in the city, one of the first orders issued by the Union authorities enjoined all persons having possession of such records to report them at once to the provost marshal.² In the face of a great conflagration, however, little attention could be given to collecting the records in the streets and abandoned offices.

Late next day Secretary of War Stanton telegraphed Weitzel to forward immediately

all papers found at Richmond.³ On the morning of April 5, therefore, Weitzel commenced an investigation which was continued by Assistant Secretary of War Charles A. Dana upon his arrival that afternoon.⁴ Weitzel wired Stanton that the records would fill a transport,⁵ but on April 6 Dana reported that he had been unable to discover much of value, the more important records obviously having been removed by the Confederate government.⁶ For this reason, perhaps, Dana gave no further attention to the matter, and the local military authorities made little effort to comply with his instructions to collect the records for forward-

*Paper read before the annual meeting of the Society of American Archivists at Hartford, Conn., Oct. 7, 1942.

¹George F. Shepley, "Incidents of the Capture of Richmond," *Atlantic Monthly*, XLVI (1880), 24; Charles A. Page, *Letters of a War Correspondent* (Boston, 1899), pp. 323, 334; *New York Tribune*, Apr. 3, 1865; *New York World*, Apr. 8, 1865; E. T. Walthall [Walthall], "Fall of Richmond, April 3, 1865," *Confederate Veteran*, XVII (1909), 215; Mrs. Burton Harrison, *Recollections Grave and Gay* (New York, 1911), pp. 211-12. An article specifically intended to furnish background for any inquiry into what happened to archives of the Confederate government at Richmond is Dallas D. Irvine, "The Fall of Richmond: Evacuation and Occupation," *American Military Institute, Journal*, III (1939), 67-79.

²Shepley, *Atlantic Monthly*, XLVI, 25; *New York Times*, Apr. 6, 1865.

³Office of the Secretary of War (abbreviated hereafter as O. S. W.), telegrams sent by the Secretary of War, 1861-1881, vol. XXX, p. 222, National Archives. (All unpublished materials cited hereafter are located in the National Archives unless otherwise indicated.) External criticism shows this telegram to have been incorrectly dated April 5 at some time after it was sent. It is reproduced with the erroneous date in *The War of the Rebellion: A Compilation of the Official Records of the Union and Confederate Armies* (70 vols. in 128 parts, with atlas, Washington, 1881-1901), ser. I, vol. XLVI, pt. III, p. 584. (This compilation is cited hereafter as O. R., references being to Series I unless otherwise indicated.)

⁴O. S. W., telegrams received by the Secretary of War, 1861-1870, vol. XLV, pp. 300-307; Charles A. Dana, *Recollections of the Civil War* (New York, 1898), p. 265; O. R., vol. XLVI, pt. III, p. 575.

⁵O. S. W., telegrams received by the Secretary of War, 1861-1870, vol. XLV, p. 286, which shows that this telegram was received at 11:15 a. m. and not at 11:15 p. m. as indicated in O. R., vol. XLVI, pt. III, p. 584.

⁶O. R., vol. XLVI, pt. III, pp. 593-94.

ing to the War Department. Nevertheless, as a result of this momentary concern with records at Richmond, general orders issued by the War Department on April 7, contained instructions that all officers coming into command of places captured from the enemy should collect and forward to the Adjutant-General's Office any papers left behind by the Confederates that might be of public use or interest.⁷

The records in the Richmond offices and streets had already been ransacked by mobs during the Confederate withdrawal,⁸ and from the moment of the Union occupation they were pillaged for souvenirs by the troops and a swarm of Union camp followers.⁹ The

continued neglect of the military authorities allowed this pillaging to go on for days, each day bringing a new influx of curiosity seekers eager to obtain mementos. The Richmond *Whig* described the situation as follows:

... Documents before deemed of the highest importance are whirled about the streets upon every gust of wind; like leaves of Autumn they choke the gutters. Bundles of records are hawked about the streets, and sold in the suttler stores for wrapping paper; old ledgers and daybooks from the Treasury and Auditor's offices, half filled, are made to perform another service in a commercial way, in the shop and counting room. Pay-rolls of the Confederate army, paid and unpaid, half-burned, are bundled off to the paper mill to be converted into virgin paper again. . . .

Any number of historians that are to be, members of historical societies, savans of learning and research are in Richmond intent upon hunting up and appropriating any little record, scrap of history, relic or memorial that might serve to adorn the pages of history, or fill a niche in the museum of curiosities of the "Great Rebellion"—its rise,

⁷*Ibid.*, ser. III, vol. IV, pp. 1258-59.

⁸*Ibid.*, ser. I, vol. XLVI, pt. III, pp. 593-94.

⁹*Ibid.*, pp. 1132, 1214; Page, pp. 330, 342; Mrs. Harrison, pp. 216-17; Silas Adams, "The Capture of Richmond, Virginia, April 3, 1865," *Military Order of the Loyal Legion, Maine Commandery, War Papers*, III (1908), 256, 259.



Ruins of Richmond viewed from across the Basin. The main War Department offices were located up the street on the left, in the block this side the one with the steepled church.



Ruins of the business district of Richmond (probably Main Street looking west from about Thirteenth Street).

progress, decline, and fall, with *souvenirs* of authors and leaders. Prominent among the things most to be desired are the autograph of Jeff Davis, the Cabinet, and other prominent actors in the drama of the Rebellion. Searchers about the public buildings have been fortunate enough to get hold of bundles of public documents, "of no use to any one but the owners," but of incalculable value to autograph hunters, who pay fabulous prices for them.¹⁰

¹⁰Richmond *Whig*, Apr. 27 and 28, 1865. A Washington bookseller by the name of Alfred Hunter bought up a large quantity of printed Confederate documents that he later tried to sell to the War Department (Record and Pension Office [abbreviated hereafter as R. & P. O.], document file, no. 429707, incls. 35-37). Another quantity of documentary debris gathered up at Richmond, in this case by a Chicago pastor, has recently been brought to light at Tufts College (Works Progress

Nothing effective was done to collect the scattered records left at Richmond until the assassination of Lincoln on April 15 aroused the vindictiveness of the North and furnished a powerful impulsion to seek evidence of the complicity of Southern leaders in the assassination plot and other criminal conspiracies.¹¹ Orders of April 19 relieved Major General Henry W. Halleck as Chief of

Administration, Historical Records Survey, *Calendar of the Ryder Collection of Confederate Archives at Tufts College* [mimeo., Boston, 1940], pp. iii, 71-75). This collection is not of any major importance; many of the seemingly more significant documents were published long ago in the O. R. from other copies.

¹¹O. R., vol. XLVI, pt. III, p. 1132.

Staff in Washington, and on April 22 he assumed command at Richmond of the new Military Division of the James.¹² He immediately directed the military governor of the city to take care for the preservation of all Confederate records pending the arrival of an aide-de-camp, Colonel R. D. Cutts, who was to be placed in charge of their collection.¹³ On April 25 Colonel Cutts was appointed "keeper of public archives" with adequate assistance and suitable working accommodations in the former Federal custom-house. Simultaneously stringent orders were issued to enforce the recovery, collection, and safekeeping of Confederate materials of all sorts.¹⁴ Under the watchful eye of Halleck, Cutts set to work with vigor and between May 2 and May 27 shipped 349 boxes, barrels, and hogsheads of Confederate materials to Washington with rough invoices for each shipment. Some 128 of these units, however, contained Quartermaster's Department records recovered at Lynchburg and forwarded through Richmond.¹⁵

While Cutts was thus engaged at Richmond, 80 boxes of Confederate War Department records of prime importance fell into possession of the Union army at Charlotte, North Carolina, and early in June records of the Confederate Congress and Post Office Department to the extent of 37 boxes were recovered at Chester, South Carolina. Later in that month 40 boxes and packages containing records of the Confederate Treasury Department, Provisional Congress, and local ordnance establishments were forwarded from Georgia.¹⁶ In the

same general period smaller quantities of records were captured at various other points throughout the South.¹⁷ All significant captures were promptly forwarded to the War Department in accordance with the general orders of April 7 and frequently under telegraphic flagellations from Stanton.

By the middle of July, therefore, a large mass of Confederate records had accumulated at Washington, and cursory inspection had shown that most of the material was in great disorder.¹⁸ It was considered highly important that this material should be thoroughly examined for evidence of heinous criminality on the part of Jefferson Davis and the other Southern leaders recently captured and thrust into prison. Accordingly, on July 21, 1865, orders were issued directing that a special bureau be organized in the Adjutant General's Office to take charge of the Confederate archives and appointing Professor Francis Lieber of Columbia College, New York City, chief of the bureau with the rank of colonel.¹⁹ As one of the most distin-

¹⁷Two boxes of Davis' papers, mostly personal in nature, were seized in Florida (*ibid.*, pp. 823-24). Papers of Generals Pillow and Beauregard were captured in Georgia (*O. R.*, vol. XLIX, pt. I, pp. 550-53). North Carolina records were recovered at Salisbury, N. C. (*ibid.*, vol. XLVII, pt. III, p. 560), and twelve boxes of Tennessee archives in Georgia (*ibid.*, vol. XLIX, pt. II, p. 800). Louisiana archives were surrendered at Shreveport (*ibid.*, vol. XLVIII, pt. II, pp. 816, 927). Only a few papers were recovered in the capital of South Carolina (*ibid.*, vol. XLVII, pt. III, pp. 560-61, 672), the state archives having been removed to a swamp near Chester (*South Carolina Women in the Confederacy* [2 vols., Columbia, S. C., 1903-1907], II, 120-21). Records of the Georgia legislature are said to have been saved in similar fashion (Wallace P. Reed in *Confederate Veteran*, VII [1899], 360). Generally speaking, the military authorities seem to have contented themselves with abstracting from captured state archives such records as pertained to secession and the activities of various southern officials during the war (cf. *O. R.*, ser. II, vol. VIII, p. 833, referring to examination of Florida archives).

The relatively few records of Confederate military commands obtained in 1865 were acquired for the most part under circumstances not definitely known. Miscellaneous records of various western commands were surrendered to Major General Canby at New Orleans (*A. O.*, document file, C, no. 12).

¹⁸*A. O.*, letters sent, book I, p. 286.

¹⁹General orders no. 127, Adjutant General's Office, July 21, 1865, *O. R.*, ser. III, vol. V, p. 95.

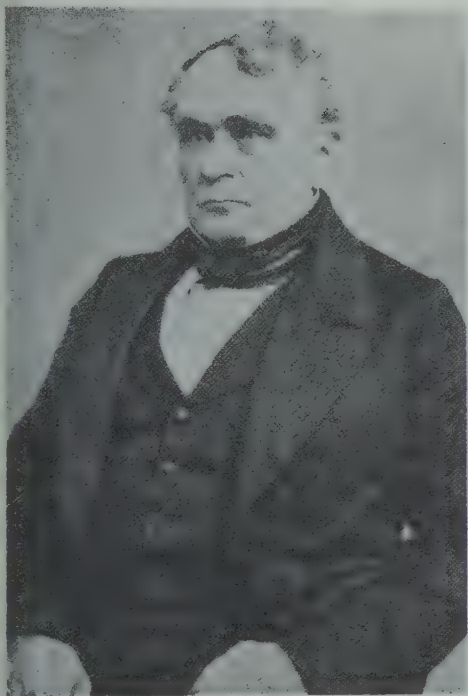
¹²*Ibid.*, pp. 883, 891.

¹³*Ibid.*, p. 896.

¹⁴*Ibid.*, p. 944.

¹⁵Archive Office (abbreviated hereafter as A. O.), document file, J, nos. 11-18, 20-24. Major Robert N. Scott, in later years to be an important figure in the publication of the *Official Records*, replaced Cutts near the end of May and forwarded a few items (*ibid.*, J, nos. 17½ and 25).

¹⁶Dallas D. Irvine, "The Fate of Confederate Archives," *American Historical Review*, XLIV (1939), 828, 834, 837-39, and the sources there cited.



FRANCIS LIEBER

guished publicists of the time, Lieber needs no introduction to the student of history, but it may well be mentioned that he was a consultant of the War Department during the war on questions of international law and that he was the author of the classical *Instructions for the Government of the Armies of the United States in the Field* (1863).²⁰

Lieber's bureau was actually organized about the middle of August. On August 14 his son, Brevet Lt. Col. G. Norman Lieber—later to be a distinguished Judge Advocate General of the Army—was appointed assist-

ant chief.²¹ On August 21 a guard was detailed for the quarters assigned to the bureau, which were located on the south side of F Street between Eighteenth and Nineteenth Streets—a site now occupied by the old Interior Department Building.²² On August 23 organic regulations were issued by the Adjutant General in the name of the Secretary of War. Among other things these specified that the bureau should be known as the "Archive Office of the War Department," that it should be attached to the Adjutant General's Office, and that the archives in its custody should be "diligently collated, classified, and filed for reference, and copies made where deemed essential."²³

²¹Townsend to G. N. Lieber, Aug. 14, 1865, in A. O., file of "Orders and Regulations Pertaining to the Archive Office."

²²Special orders no. 32, headquarters 195th Regt. Pa. Vols., Aug. 21, 1865, and Henry to Morgan, Apr. 10, 1866, in A. O., file of "Orders and Regulations Pertaining to the Archive Office." *Boyd's Washington and Georgetown Directory*, 1866, p. 116, gives 167 F Street as the address of the Archive Office. *Ten Eyck's Washington and Georgetown Directory*, 1855, p. 40, gives 167 F Street as the address of R. W. Mead, a naval officer. This address might conceivably have applied to either of two houses that stood in the middle of the block on the south side of the street. A study of the old street numbering system and of old real estate records of the District of Columbia shows the Mead house to have been the one later numbered 1816 F Street, N. W. Photographs of this house, taken by the Signal Corps at a later date and now preserved in the National Archives (Signal Corps, red book series, miscellaneous, vol. I, nos. 3148 and 3155), are shown. On the old street numbering system see the act of May 18, 1854, *Laws of the Corporation of the City of Washington Passed by the Fifty-First Council* (Washington, 1854), p. 101 (District of Columbia Public Library, Washingtonian Division); and *Boyd's Washington and Georgetown Directory*, 1865, p. 81. On the exact inclusiveness of the Mead property see District of Columbia, Office of the Recorder of Deeds, land records, series "WB," vol. 65, pp. 102-104, series "JAS," vol. 73, pp. 164-65, vol. 162, pp. 20-21; and various old plat books in the same office and the Library of Congress, Maps Division.

²³Regulations for the Archive Office of the War Department, Aug. 23, 1865, in A. O., file of "Orders and Regulations Pertaining to the Archive Office." A supply of stationery had already been printed with the heading "Bureau of Rebel Archives," and this stationery was used for a time (A. O., letters sent, book I, p. 66). Lieber inferred from the change of name and the fact that records of the disbanded Union XIII Army Corps were shortly received that the purpose was to make his

²⁰John M. Vincent in *Dictionary of American Biography* (20 vols. and index, New York, 1928-37), XI, 236-38; Brainerd Dyer, "Francis Lieber and the American Civil War," Huntington Library, *Quarterly*, II (1939), 449-65. Lieber was a fairly close friend of Major General Halleck, who was also an authority on international law.



House occupied by the Archive Office, 1865-1867.

With six clerks, the two Liebers set to work to open 428 boxes, 69 barrels, 2 hogsheads, and 120 mail bags for preliminary examination, without the aid of more than a few invoices to show from where the containers had come.²⁴ For the most part the records were found to be in the greatest disorder, with much Richmond street dirt testifying to the fact that some of them had been collected

with the shovel and broom.²⁵ The progress of the examination very shortly uncovered, besides quantities of worthless Confederate notes and bonds, several million dollars worth of supposedly valuable Louisiana securities.²⁶ After causing much worry for their safety, these securities were turned over to the Treasury Department on October 23, 1865.²⁷

office the depository for the records of discontinued Union commands as well as for the Confederate archives and thus an office of "General American War Archives" (*ibid.*, book I, p. 91; Thomas S. Perry, *The Life and Letters of Francis Lieber* [Boston, 1882], p. 395). The XIII Army Corps records were later said to have been sent to the office by mistake (A. O., document file, A, no. 12).

²⁴A. O., letters sent, book I, pp. 18, 32-37, 286.

²⁵*Ibid.*, book I, p. 32; Perry, p. 360.

²⁶A. O., letters sent, book I, p. 9. These securities had been surrendered by the Confederate Treasurer of Louisiana and forwarded from New Orleans by General Sheridan (*O. R.*, vol. XLVIII, pt. II, pp. 816, 1073, 1075).

²⁷Receipt dated Oct. 23, 1865, and inventories dated Nov. 18, 1865, in A. O., subjects file, under "Louisiana."



Another view of house occupied by the Archive Office, 1865-1867.

Preliminary examination of the records having been completed by September 15, some 244 containers filled with accounts of the Second Auditor and Quartermaster's Department, deemed of little value, were re-packed and stored in another building, and detailed examination and classification of the remaining records begun, particular attention being devoted at first to the records of the Confederate Congress.²⁸ Before this work had gone very far a request was received from the Surgeon General's Office for the transfer of the Confederate medical

records for use in compiling the *Medical and Surgical History of the War of the Rebellion*, then already in process of preparation. This request was met by the transfer of the medical books on November 22, 1865, with the understanding that they should be returned when no longer needed.²⁹ They were finally returned in 1872, together with similar materials that had been collected by the Surgeon General's Office.³⁰

²⁹*Ibid.*, p. 74; document file, W, no. 7; special report of the chief of the Archive Office, Jan. 18, 1866, appendix C (see note 31).

³⁰A. O., document file, S, no. 80.

²⁸A. O., letters sent, book I, pp. 32-37, 45-46.

On January 18, 1866, Francis Lieber addressed to the Secretary of War a comprehensive report on the nature of the materials in his custody as far as had been revealed by considerable progress in the work of detailed examination and classification.³¹ According to this report, most of the records pertained to the Confederate War, Treasury, and Post Office Departments. A small quantity of material relating to activities of the State Department had also been uncovered and examined with particular attention, but it would appear that this material consisted almost entirely of copies of diplomatic instructions and dispatches probably furnished for the information of Congress and recovered in the Capitol at Richmond. No records of other departments or of the Executive Office had been found, but important congressional materials were reported, including the manuscript journals of both houses, nearly complete, numerous statutes, and presidential messages.³²

The files of letters and telegrams received by the Secretary of War were reported as complete, but various of the related correspondence books were reported missing. Contrariwise, the correspondence books of the Adjutant and Inspector General were practically complete, but important segments of his correspondence files were missing.³³ Other records of the Adjutant and Inspector General's Office, relating to army personnel,

were extensive, including the important and bulky files of muster rolls, largely intact. There were also complete sets of the general and special orders issued by that office. Associated with these materials were some records of the Bureau of Conscription.³⁴

The records of the Quartermaster General's Office were even more extensive and included the major portion of the Quartermaster General's correspondence books and files. Records of other War Department offices appeared to be lacking. There were indeed considerable quantities of Medical Department and Ordnance Department records, but these were field records collected mainly from the numerous hospitals in and around Richmond and the several important ordnance establishments in Georgia.³⁵

The records of the Treasury Department were voluminous but highly fragmentary. A large portion consisted of accounts of quartermasters and commissaries that had been settled in the Office of the Second Auditor. These were considered of no great value. Another portion, ascribed to the Register's Office, consisted largely of ledgers and journals relating to various Confederate loans. There were also the registers of treasury note issues³⁶ and various books and papers relating to taxation, collectors, and sequestration. Correspondence records, except in the case of letters to collectors, were very meager; those of the Secretary's Office pertained only to the earliest period of the

³¹Draft copy among records of the Archive Office. The signed copy transmitted to Stanton was not registered as received in the Office of the Secretary and no trace of it has been found in the War Department archives.

³²The invoices of Colonel Cutts and the present contents of the collection show that the materials gathered up in the capitol at Richmond were highly miscellaneous, including bills, acts, resolutions, amendments, petitions and memorials, reports of committees, presidential messages, reports and estimates from all the departments, copies of battle reports, Virginia state records, etc. Some of these materials were recovered in numerous printed copies as prepared for use by the members of Congress.

³³Specifically, for the year 1861 and the periods July-October, 1862, and January-June, 1863.

³⁴This Bureau had been abolished by orders of March 29, 1865, and its paperwork functions transferred to the Adjutant and Inspector General's Office (*O. R.*, ser. IV, vol. III, pp. 1176-77).

³⁵The bound volumes of ordnance records, as eventually "classified" in the Archive Office, are listed in Lester J. Cappon, "A Note on Confederate Ordnance Records," *American Military Institute, Journal*, IV (1940), 98-102.

³⁶These registers were used by Raphael P. Thian, chief clerk of the Adjutant General's Office, in preparing his *Register of Issues of Confederate States Treasury Notes, Together with Tabular Exhibits of the Debt, Funded and Unfunded, of the Confederate States of America* (Washington, 1880).

war. Some records of the Third Auditor's Office were also found, associated with records of the Post Office Department.

Most of the Post Office Department records pertained to the Contract Bureau, but they also included letter books of the Appointment Bureau and of the Inspector's Office and one letter book of the Postmaster General.³⁷ One hundred and twenty mail bags had been found upon examination to contain Confederate mail with the exception of one bag, which contained United States mail apparently seized by the Confederates at the beginning of the war. Official communications and newspapers found in the mail had been confiscated by Lieber's office, but private letters had been left unopened with the intention of turning them over to the United States Post Office Department for delivery.³⁸

Other materials reported by Lieber included records of the United States and Confederate States District Court for the District of Cape Fear, covering a period from 1801 to 1864; two letter books of Governor Z. B. Vance of North Carolina for the years 1862-1865; various record books and papers of Robert E. Lee,³⁹ Beauregard, Kirby Smith, Pillow, and other Confederate commanders; and a colorful collection of flag designs that had been submitted to the congressional committee charged with choosing a flag for the Confederacy.

Soon after the submission of Lieber's report, several bodies of material were transferred to other custody by direction of higher

authority.⁴⁰ To the Attorney General, on February 10, 1866, were transferred the records of the United States and Confederate States District Court for the District of Cape Fear, and to the same officer, on March 30, were transferred certain records of the United States and Confederate States District Court, District of Pamlico, and the United States and Confederate States Circuit Court, District of North Carolina.⁴¹ To the Postmaster General, at his request, were transferred on March 27 all books, papers, mail bags, and other property formerly belonging to the Confederate Post Office Department.⁴² Most of the record books included in this transfer were received back in 1896 through the Department of Justice;⁴³ the rest of the records were transferred by the Post Office Department to the Library of Congress in 1906.⁴⁴

From the beginning, Lieber's office had been continually on the lookout for incriminating evidence against those Confederates who were particular objects of Northern animosity, and on several occasions there had been correspondence incident to the search for evidence against particular persons.⁴⁵ It is obvious, however, that the archives failed to yield up much evidence of any legal value, and Lieber's report of January 18, 1866, practically admitted as much. Indeed, the President and his Cabinet had long since come to the realization that there was no evidence on which the Confederate government, in the person of Jefferson Davis or

⁴⁰Two boxes of records of the Orange and Alexandria Railroad had already been returned to the railroad company on Oct. 2, 1865 (A. O., document file, M, no. 19).

⁴¹A. O., document file, A, nos. 16, 17, 66; letters sent, book I, pp. 148, 155. Inventories of the records involved in each of the transfers are contained in the document file, A, no. 66.

⁴²A. O., document file, W, no. 20, P, no. 8; letters sent, book I, pp. 153-54. The receipted inventory is in the document file, P, no. 8.

⁴³R. & P. O., document file, no. 452631.

⁴⁴*Report of the Librarian of Congress*, 1907, p. 139.

⁴⁵A. O., letters sent, book I, pp. 30, 112, 124, 127-30, 163; endorsement book, 1865-1882, pp. 56-57, 59.

³⁷The letter book of the Postmaster General and the letter books of the Appointment Bureau, as well as a few other books and the loose papers, are now in the Library of Congress (see note 44).

³⁸All newspapers associated with the War Department collection of Confederate archives were transferred to the Library of Congress in 1914 (The Adjutant General's Office [abbreviated hereafter as A. G. O.], document file, 1894-1917, no. 2125894).

³⁹The records of Lee related to his command of Virginia state forces at the very beginning of the war.

others, could be convicted of complicity in the assassination plot, and the plan of trying Davis for treason had run into difficulties. As a result Congress began to conduct an investigation in the spring of 1866.⁴⁶ On May 4, Lieber received an order from the Judiciary Committee of the House of Representatives to lay before it all evidence tending to connect Davis, the Confederate government, and the Confederate conspirators in Canada with the assassination plot.⁴⁷ In accordance with this order Lieber presented a long report on May 18, accompanied by copies of many documents.⁴⁸ About a month later, on June 22, the committee called for all evidence relating to the responsibility of the Confederate government for the cruel treatment of Union prisoners, and on June 28 Lieber submitted an additional report upon this matter.⁴⁹ The majority report of the committee, rendered to Congress in July, published much of the material submitted by Lieber but admitted that it had little direct bearing on the assassination plot. The weakness of the evidence presented, together with the exposure in a minority report of a malicious hoax attempted by some false witnesses who had come forward, had the effect of discrediting the idea that the Confederate government had been implicated.⁵⁰

After the adjournment of Congress in July there ensued a relatively uneventful period in the history of the Archive Office. Francis Lieber seems to have returned to Columbia College for the academic year of 1866-67, leaving the office in charge of his son, and it was not until March 1867 that anything noteworthy occurred. On the 15th of that month the younger Lieber carried out

instructions to transfer to the Receiver for the War Department, Acting Inspector General W. Scott Ketchum, all Confederate notes and bonds found among the Confederate archives. The face value of those delivered, canceled and uncanceled, amounted to nearly 12 million dollars.⁵¹

The younger Lieber was one of a number of judge advocates retained in service beyond the end of the war with the expectation that they could eventually be mustered out.⁵² An act of February 25, 1867, however, made their retention permanent.⁵³ On April 23, therefore, the younger Lieber was ordered to report to Major General Sheridan at New Orleans for duty as judge advocate of the Fifth Military District.⁵⁴ Supplementary instructions directed him to turn the Archive Office over to its principal clerk, which he did on April 27.⁵⁵ Francis Lieber returned to take charge a few days later but was not destined to retain his position long. On August 12 General Grant became Secretary of War *ad interim* in place of Secretary Stanton,⁵⁶ and on August 19 he directed that the Archive Office and the Office of the Commissary General of Prisoners should be merged into the Adjutant General's Office and that all officers on duty in the two offices affected should be discharged together with all clerks whose services could be spared.⁵⁷ The effect of this order was to

⁵¹A. O., document file, K, nos. 5, 10; W, no. 41. The amount of uncanceled funds was \$3,969,369.30. In 1869 all Confederate funds that had collected in the possession of the War Department were turned over to the Treasury Department (O. S. W., "General Ketchum's records," letters sent, vol. II, p. 99; endorsement books, vol. VI, p. 281).

⁵²Act of July 28, 1866, *U. S. Statutes at Large*, XIV, 334; A. O., letters sent, book I, p. 261.

⁵³*U. S. Statutes at Large*, XIV, 410.

⁵⁴Special orders no. 208, Adjutant General's Office, Apr. 23, 1867.

⁵⁵A. O., document file, A, no. 56; W, no. 56.

⁵⁶Copy of Johnson to Grant, Aug. 12, 1867, Headquarters of the Army, document file, 1867, among unnumbered papers at end of file.

⁵⁷Memorandum of orders, Aug. 19, 1867, R & P. O., document file, no. 429707, incl. 33.

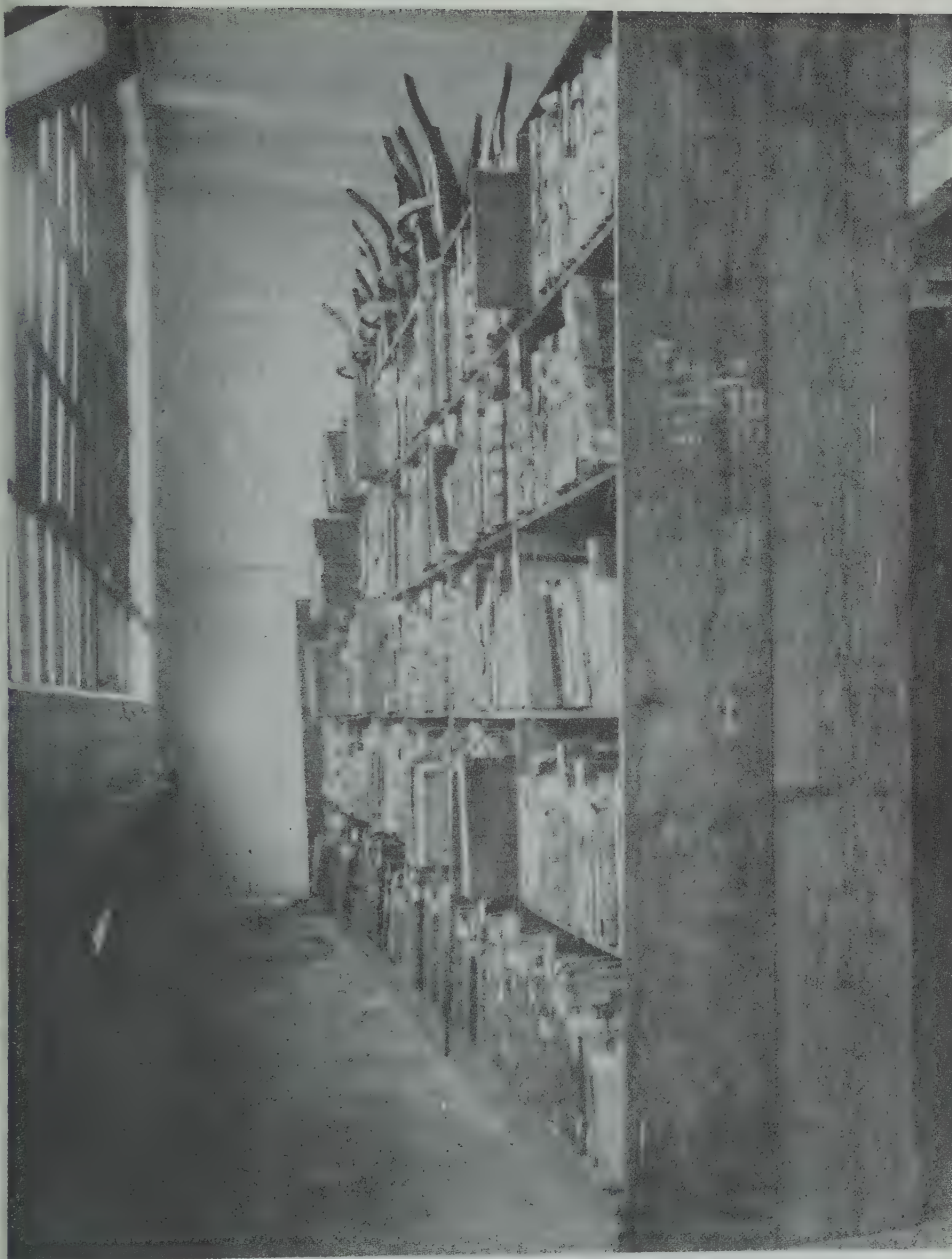
⁴⁶Roy F. Nichols, "United States Vs. Jefferson Davis, 1865-1869," *American Historical Review*, XXXI (1926), 266-67.

⁴⁷A. O., document file, J, no. 5.

⁴⁸A. O., letters sent, book I, p. 171; Perry, pp. 363-64.

⁴⁹A. O., document file, J, no. 6; letters sent, book I, p. 200.

⁵⁰*House Reports*, 39th Cong., 1st sess., no. 104.



Some of the bound volumes included in the War Department collection of Confederate archives. Photograph taken about 1935 when the records were housed in an old garage on the site now occupied by the new War Department Building at 21st and D Streets, N. W.

terminate Lieber's service and to place the Archive Office in full charge of its principal clerk, a Mr. Bazaleel Wells.

In the latter part of November 1867, the case against Jefferson Davis came up for trial, and Mr. Wells was called upon to go to Richmond with such records as were to be used as evidence against the former Confederate president, but a postponement of the case prevented the presentation of this evidence in court.⁵⁸ About a month later Mr. Wells was engaged in superintending the removal of the Archive Office to another building, apparently the one contemporaneously identified as No. 533 17th Street.⁵⁹ Toward the end of 1868 the office was again moved, this time to a building on the southwest corner of 17th and G Streets.⁶⁰ Here the office remained for some 13 years until its eventual transfer into the new State, War, and Navy Building.⁶¹

In the course of the year 1870 it became an important function of the Archive Office to furnish, at first to the Treasury Department and then to the newly created Justice Department, any evidence of the former disloyalty of persons making claims against the Government and such other evidence relating to claims as might be requested.⁶² In the following year this function was greatly expanded as a result of the establishment by Congress of a "Southern Claims Commission."⁶³ At the same time a similar service began to be rendered to the Pension Office⁶⁴ and to the Mixed Commission on American and British Claims set up under

the Treaty of Washington, 1871.⁶⁵ For the most part this new business relating to claims was highly routine in character, but it may be mentioned that the materials in the Archive Office were searched in 1871 for evidence in support of the so-called "Alabama Claims," which the Treaty of Washington had made subject to arbitration.⁶⁶

On July 26, 1871, Wells submitted his resignation from the Government service for reasons of health, and on August 1, when his resignation took effect, Mr. A. P. Tasker, another of Lieber's original clerks, took charge of the office in his stead.⁶⁷ In the next year Tasker and the four other clerks then employed in the office were appointed to regular clerkships under an appropriation act of May 8, 1872.⁶⁸ Previous to this time they had been special employees paid out of a so-called Provost Fund.⁶⁹ In this year, also, Tasker secured the return of the Confederate medical records from the Surgeon General's Office.⁷⁰

A new period in the history of the office began in 1874 with the resurrection of the project for publishing the official records of the war, both Union and Confederate.⁷¹ This project had been suspended by Congress

⁵⁸A. O., document file, A, no. 123; register of letters received, pp. 240-42; treaty of May 8, 1871, *U. S. Statutes at Large*, XVII, 867-69 (arts. XII-XVII).

⁶⁶A. O., document file, S, no. 63; letters sent, book II, p. 214. This search brought to light drawings, captured at Richmond, of the Confederate cruiser from which these claims took their name (A. O., document file, S, no. 66).

⁶⁷*Ibid.*, W, no. 71; T, no. 36.

⁶⁸A. O., letters sent, book II, pp. 321-22; *U. S. Statutes at Large*, XVII, 79. The Archive Office received an annual appropriation from this time until it ceased in 1881 to have an independent status (*ibid.*, XVII, 500, XVIII [pt. 3], 100, 359, XIX, 160, 310, XX, 195, XXI, 23, 226, 402, XXII, 238).

⁶⁹A. G. O., records of Provost Fund, vol. I, p. 1 (forward numbering) and pp. 14-90 (backward numbering); general orders no. 258, Adjutant General's Office, Sept. 19, 1864; general orders no. 59, Adjutant General's Office, Apr. 7, 1865.

⁷⁰A. O., letters sent, book II, pp. 343, 349; document file, T, no. 48; S, no. 80.

⁷¹On the history of this project see O. R., general index, pp. iii-xxii, and Dallas D. Irvine, "The Genesis of the Official Records," *Mississippi Valley Historical Review*, XXIV (1937), 221-29.

⁵⁸Nichols, *Am. Hist. Rev.*, XXXI, 275-77; A. O., document file, A, no. 71; letters sent, book II, p. 10.

⁵⁹*Ibid.*, II, 7, 10, 55.

⁶⁰*Ibid.*, II, 29-30; document file, M, no. 25.

⁶¹See p. 109 *infra*.

⁶²A. O., document file, H, no. 22; letters sent, book II, p. 109 *et seq.*, *passim*; act of June 22, 1870, *U. S. Statutes at Large*, XVI, 162-65.

⁶³Act of Mar. 3, 1871, *ibid.*, XVI, 524-25; A. O., letters sent, book II, pp. 161, 172 *et seq.*, *passim*.

⁶⁴*Ibid.*, II, 123; document file, P, no. 24; register of letters received, p. 438 *et seq.*, *passim*; endorsement book, 1865-1882, pp. 86, 99 *et seq.*, *passim*.

in 1866, and it was not until 1874 that authorization for its resumption was obtained.⁷² The work of preparing the Confederate materials to be included was assigned to Tasker,⁷³ but since this work had to be carried on after hours, little progress was made until Congress was induced, in March of 1875, to authorize extra compensation for such work.⁷⁴ On the following May 3 central direction of the whole project was intrusted to the chief clerk of the War Department, Mr. H. T. Crosby.⁷⁵

It soon became clear from work on records in the Office of the Secretary of War that the selection of related Union and Confederate materials would have to be closely coordinated, particularly if they were to be published simultaneously for the same periods.⁷⁶ Accordingly, on September 15, 1875, Dr. W. T. Barnard, who as Secretary Belknap's private secretary had been prosecuting the work on the records in the Secretary's Office, was given general supervision, also, over the work on the Confederate archives.⁷⁷ These he soon found to be too incomplete to furnish any adequate view of the war from the Confederate side.⁷⁸

During the summer of 1875, however, a former Confederate general, Marcus J. Wright of Tennessee, had generously offered an important collection of Confederate battle reports to the War Department for whatever monetary value it might care to place upon



MARCUS J. WRIGHT

them and had also offered his services for locating other Confederate materials. He was ultimately given \$2,000 for his records, but his offer of services was politely parried. Wright nevertheless undertook, in November 1875, to locate as many battle reports as he could for the Department and asked for a check list of those already on file, which was furnished.⁷⁹ Early in the next year the War Department itself opened negotiations with the Southern Historical Society with a view to obtaining copies of records in possession of that organization, but since it would not accord the Society the corresponding privilege of obtaining copies of records in the Archive Office, the Society declined to cooperate.⁸⁰

⁷²Act of July 27, 1866, *U. S. Statutes at Large*, XIV, 369; act of June 23, 1874, *ibid.*, XVIII (pt. 3), 222.

⁷³According to O. R., general index, p. vii. The contemporary records are not conclusive either in substantiating or disproving this assertion (see, for example, O. S. W., register of letters received, vol. 184, entry B162).

⁷⁴Crosby to Garfield, Jan. 13, 1875, O. S. W., letters sent, vol. 78, pp. 78-79; act of Mar. 3, 1875, *U. S. Statutes at Large*, XVIII (pt. 3), 390.

⁷⁵Sec. of War to Crosby, May 3, 1875, O. S. W., letters sent, vol. 78, p. 412.

⁷⁶A. O., document file, W, no. 95.

⁷⁷Sec. of War to Townsend, Sept. 15, 1875, *ibid.*, W, no. 94.

⁷⁸Sec. of War, *Annual Report*, 1875, I, 26.

⁷⁹Correspondence contained in A. O., document file, W, no. 90; letters sent, book III, pp. 117-18, 126, 133, 138, 144-45, 150-51.

⁸⁰Correspondence contained in War Records Office (abbreviated hereafter as W. R. O.), document file, 1877, no. 24; editorial in *Southern Historical Society Papers*, VI (1878), 239-40.

Congress having withdrawn its authorization for the payment of extra compensation to the regular clerks concerned with the publication project, it was necessary after the beginning of the new fiscal year to utilize more largely the services of special employees and consequently to give the project more of a distinct administrative status.⁸¹ As a part of the necessary adjustment Dr. Barnard was placed in full charge of the whole project on July 25, 1876.⁸² The status and normal functions of the Archive Office were not affected; Tasker remained in charge while continuing to lend his assistance to the publication project.

In January of 1877 Barnard reopened negotiations with the Southern Historical Society without success,⁸³ but at the same time General Wright reported his first success in obtaining access for the War Department to a collection of Confederate records in private hands.⁸⁴ A few months later Dr. Barnard resigned, being replaced in charge of the publication project on June 1, 1877, by Dr. Thomas J. Saunders, one of his assistants.⁸⁵ Saunders resigned in his turn before the year was out,⁸⁶ whereupon the Secretary of War decided to place the project in charge of an army officer in order to insure the permanence of competent direction. Captain Robert N. Scott of the Third Artillery was detailed to this duty from Fort Ontario, New York, on December 14, 1877, and assumed charge about the end of the year.⁸⁷



ROBERT N. SCOTT (AS A MAJOR)

Six months later, on July 1, 1878, General Marcus J. Wright was appointed official agent of the War Department for the purpose of securing possession or use of Confederate records not in the custody of government.⁸⁸ At almost exactly the same time two collections of Confederate records were purchased under an authorization for such purchases which was contained in the latest appropriation for the publication project.⁸⁹ One of the collections consisted of the headquarters records of General Albert Sidney

⁸¹Act of July 31, 1876, *U. S. Statutes at Large*, XIX, 119.

⁸²Sec. of War to Barnard, July 25, 1876, O. S. W., letters sent, vol. 80, p. 741.

⁸³W. R. O., document file, 1877, no. 24.

⁸⁴A. O., document file, W, nos. 103-104; letters sent, book III, p. 210.

⁸⁵O. S. W., register of letters received, vol. 187, entry 4362; W. R. O., register of letters received, 1877-1878, p. 24; circular to chiefs of bureaus, June 16, 1877, O. S. W., letters sent, vol. 81, p. 372.

⁸⁶Saunders to Sec. of War, Dec. 8, 1877, O. S. W., document file, 1877, W, no. 10216.

⁸⁷Special orders no. 254, Adjutant General's Office, Dec. 14, 1877; circular to chiefs of bureaus, Jan. 5,

1878, O. S. W., letters sent, vol. 84, p. 14. Scott later indicated that he had assumed charge in January 1878 (Sec. of War, *Annual Report*, 1878, I, 539) but the first letter sent out over his signature was dated Dec. 31, 1877 (W. R. O., letters sent book, 1875-1879, p. 57).

⁸⁸Sec. of War to Wright, July 1, 1878, O. S. W., letters sent, vol. 84, p. 573. Wright was at first responsible to Scott but on Sept. 23, 1878, was made responsible to the Adjutant General (*ibid.*, vol. 84, p. 742).

⁸⁹Act of June 20, 1878, *U. S. Statutes at Large*, XX, 222.

Johnston, purchased from his son,⁹⁰ and the other of records of the Army of the West and related commands, purchased from Colonel Thomas L. Snead.⁹¹ Early in August General Wright approached the Southern Historical Society with authority⁹² to assure it that its agents would be granted free access to the Confederate records in the Archive Office in return for free access to materials in possession of the Society. The result was a prompt agreement followed by the working out of arrangements for the use of these materials.⁹³

The conclusion of this agreement was a consequence of the adoption of a new policy of attempting to enlist the cooperation of southerners in making the projected compilation of official records as complete as possible on the Confederate side. In accordance with this new policy it was soon decided not to make any further purchases of Confederate records but to rely instead upon an appeal to southern pride to obtain the donation, or at least the loan, of such significant Confederate records as were held in private hands.⁹⁴ General Wright, as a former Confederate officer, was expected to be an effective medium of such an appeal, as indeed he proved

to be. During the ensuing years he spent much time traveling about the South locating valuable records and inducing their possessors to make them available for publication. As a result innumerable documents from innumerable sources were added over the course of years—either in the originals or in the form of copies—to the collection of Confederate records captured at the end of the war.⁹⁵ Meanwhile, in July 1881, the first volume of the *Official Records of the Union and Confederate Armies* was finally published, after which the remaining volumes appeared in steady succession until the publication of the general index volume almost exactly 20 years later.

During the time these developments were taking place in the history of the publication project the Archive Office continued to handle its normal business, which was described by the Adjutant General in 1876 as follows:

... Questions are constantly coming from the Pension Office as to soldiers who were prisoners of war and treated in Southern hospitals. Evidence is furnished as to claims. Enquiries are answered from persons North and South as to friends whose fate is unknown and as to property lost or destroyed. Questions asked in regard to military movements. Resolutions of Congress go there for reply, &c., &c.,—besides which the records are being prepared for publication with others of the war.⁹⁶

... The use to which these records have been put is chiefly in the furnishing of evidence to the courts and claims commissions in regard to claims. In this work several millions of dollars have been saved to the Government, two separate claims having been defeated amounting to \$700,000 and \$550,000 respectively. There are now pending before the Southern Claims Commission nearly, if not quite, 10,000 claims; against many of these

⁹⁰A. O., letters sent, book III, p. 326.

⁹¹W. R. O., document file, Jan.-June 1878, no. 117; document file, 1878-1879, no. 2½; letters sent book, 1875-1879, pp. 122-22½; 124-25, 130. The historical account contained in the general index of the O. R. lists (p. x) two purchases from Snead. This is not accurate. The second payment was a balance due on the previous purchase, the payment of this balance having been made contingent upon a special appropriation by Congress (W. R. O., letters sent book, 1875-1879, pp. 62-63; *U. S. Statutes at Large*, XX, 389).

⁹²Wright to Scott, July 31, 1878, in A. G. O., catalogue of Confederate military records received by Marcus J. Wright, 1878; Scott to Wright, Aug. 5, 1878, W. R. O., letters sent book, 1875-1879, p. 138.

⁹³Correspondence contained in A. O., document file, 6, no. 128; editorial in *Southern Historical Society, Papers*, VI, 239-40.

⁹⁴Sec. of War, *Annual Report*, 1878, I, 539; 1879, 521. Two further offers of records for sale, made in December 1878, were given polite consideration but side-tracked through the medium of noncommittal reports to Congress (A. O., document file, H, no. 86; P, no. 114; D. S. W., letters sent, vol. 86, pp. 21-22, 55, 101-102.

⁹⁵A. G. O., catalogues of Confederate military records received by Marcus J. Wright, agent of the War Department for the collection of Confederate military records, 1878-1900.

⁹⁶A. O., letters sent, book III, pp. 160-62.

evidence has been furnished and the Commissioners are constantly sending for original papers. Much more evidence can be furnished.

Many pension cases are referred here for information and private requests are made from all quarters, many of them involving pecuniary interests.⁹⁷

The existence of the Southern Claims Commission was terminated on March 10, 1880, by act of Congress,⁹⁸ but its unfinished business was largely transferred to the Quartermaster's Department, which continued to make numerous requests for information from the Confederate records. Insofar as there was a diminution in the business relating to claims, there was a compensatory increase in work on the publication project as a result of the intensified prosecution of that project under Captain Scott. It was especially necessary for the purposes of this project to accomplish a systematic classification and arrangement of the records in order to facilitate their examination and consultation as successive phases of compilation were undertaken.⁹⁹ Thus it was in this period, apparently, that all the bound volumes were classified, according to a crude approximation of provenance, into groups called "chapters" and serially numbered within each "chapter."¹⁰⁰

⁹⁷*Ibid.*, III, 177-80.

⁹⁸Act of June 21, 1879, *U. S. Statutes at Large*, XXI, 29.

⁹⁹Sec. of War to Davis, May 18, 1880, A. O., letters sent, book III, pp. 495-96.

¹⁰⁰The letter cited in the preceding note states that the work of classifying, recording, and indexing the records was then proceeding as rapidly as possible in such time as could be spared from current work. The first positive evidence that the bound volumes had been classified as indicated occurs in a list of prison records, dated July 27, 1886 (R. & P. O., document file, no. 429707, incl. 16). The original printed labels placed upon the volumes bear the words "Archive Office," which indicates that they were printed before 1882. It seems highly probable that these labels are the same as those referred to in a written request for labels and file binders that was submitted by Tasker on August 23, 1877 (A. O., letters sent, book III, p. 236). On the retained copy of this request is a notation of the receipt of instructions to have the labels printed in the printing establishment of the Adjutant General's Office.

One item of business in the late seventies that deserves special mention was the return of certain records of the state of Virginia to the authorities of that state in 1877. On various occasions since the end of the war insistent applications had been received from both Virginia¹⁰¹ and North Carolina¹⁰² for the return of state records captured by the Union army. Generally speaking, these requests had been persistently denied on the ground that the state records in question were required by the Federal Government as evidence anent the late "rebellion." The War Department was disposed to release records that did not relate to the period of the war, but for a long time, before the materials in the Archive Office were well identified and adequately arranged, there was apparently little information on the exact extent of such records. By 1877, however, when Virginia again applied for the return of its captured records, Tasker was able to draw up a list of such material in considerable amount and to indicate that various items could properly be returned as having no particular value to the War Department. The items he indicated were accordingly returned to that state.¹⁰³

Shortly afterward the state of North Carolina renewed its application for the return of two letter books of Governor Z. B. Vance, which were apparently the only significant North Carolina state records on file in the Archive Office. Since these books related to the period of the war and were considered important, this application again met with a refusal. Several years later (1880) Vance, as a United States Senator, attempted to obtain the return of his letter books to the state by action of Congress. In this attempt he was not successful, but by dint of further

¹⁰¹A. O., document file, V, no. 9; R. & P. O., document file, no. 429707, incls. 47-48.

¹⁰²*Ibid.*, no. 429707, incls. 60-82 *passim*; A. G. O., document file, 1886, no. 6997 *passim*.

¹⁰³R. & P. O., document file, no. 429707, incls. 49-56.

efforts he finally succeeded, in 1886, in getting Congress to direct that certified copies be furnished to North Carolina. This was done in 1888.¹⁰⁴

In the meantime, on June 17, 1880, Brigadier General Richard C. Drum became Adjutant General¹⁰⁵ in place of Brigadier General E. D. Townsend, who had been in control of the Adjutant General's Office since 1863.¹⁰⁶ Inasmuch as the work of the Archive Office was now intimately connected with that of the autonomous War Records Publication Office, Drum recommended that the Archive Office should be taken under the direct control of the Secretary of War.¹⁰⁷ The Secretary acted on July 24, 1880, by directing that it be merged into the War Records Publication Office.¹⁰⁸ Subsequently, it occurred to someone that this was not a sound administrative arrangement, since the War Records Publication Office was not intended to be a permanent organization.¹⁰⁹ Consequently, the original order was emended on August 10 so as to merge the Archive Office instead into the Record Division of the Office of the Secretary of War.¹¹⁰ On

August 13, however, the chief clerk of the War Department approved, in the name of the Secretary of War, a request from Scott that the employees of the Archive Office be placed under his direction pending publication of the *Official Records*.¹¹¹ A few months later, on January 17, 1881, orders were again issued merging the Archive Office into the Record Division of the Secretary's Office.¹¹² Actually the Archive Office remained a distinct entity under its old name until the fall of 1881, when without any formal action it took on the designation of "Archive Branch, Record Division."¹¹³

The indications are that the office was moved into the State, War, and Navy Building at about this time. A draft of an order has been found, dated "September 1881," making detailed arrangements for the removal of the Archive Office to certain rooms of that building.¹¹⁴ Careful collation of certain other documents shows that these rooms were actually occupied by the Archive Office at some time prior to May 1882.¹¹⁵ It seems very probable, therefore, that the change of name to "Archive Branch" was a mere conceptual reaction to the physical transfer of the personnel and records into collocation with the rest of the Record Division of the Secretary's Office. If this surmise is correct, then it is highly probable, in

¹⁰⁴A. G. O., document file, no. 6997 *passim*.

¹⁰⁵Oath of office, June 17, 1880, A. G. O., Appointment, Commission, and Personal Branch, document file, 1880, no. 3276 (filed with 1889, no. 3129). Drum's rank was made to date from June 15, 1880 (general orders no. 77, Adjutant General's Office, Nov. 26, 1880).

¹⁰⁶Townsend was retired for age on June 15, 1880 (A. G. O., Appointment, Commission, and Personal Branch, document file, no. 3246 [filed with A. G. O., Commission Branch, document file, 1869, T, no. 43]; general orders no. 53, Adjutant General's Office, June 16, 1880). He had been titular Adjutant General only since 1869 (general orders no. 54, Adjutant General's Office, June 18, 1869) but acting Adjutant General since March 1863 (O. R., ser. III, vol. III, pp. 100, 1199; E. D. Townsend, *Anecdotes of the Civil War in the United States* [New York, 1884], pp. 78-80).

¹⁰⁷Memorandum slip, June 22, 1880, R. & P. O., document file, no. 429707, incl. 24.

¹⁰⁸Endorsement of Sec. of War, July 24, 1880, on *ibid.*, incl. 22. This order made the change retroactive to July 1, 1880.

¹⁰⁹Endorsement of Samuel Hodgkins, Apr. 5, 1886, on *ibid.*, incl. 15.

¹¹⁰Endorsement of Sec. of War, Aug. 10, 1880, on *ibid.*, incl. 22.

¹¹¹Scott to Crosby, Aug. 12, 1880, and endorsement of Crosby thereon, dated Aug. 13, 1880, W. R. O., document file, 1879-1880, no. 245.

¹¹²R. & P. O., document file, no. 429707, incl. 21.

¹¹³A. O., endorsement book, 1865-1882, around p. 367.

¹¹⁴O. S. W., document file, 1882, no. 1124 B (filed with 1877, no. 4616).

¹¹⁵Slip showing the number of rooms occupied by various parts of the Office of the Secretary of War, including the Archive Branch, not dated, but inclosed in Tweedale to Sec. of War, May 3, 1882, O. S. W., document file, 1882, no. 1784 A, incl. 3 (filed with 1877, no. 4616); memorandum on the superficial area of rooms occupied by Office Secretary of War, east wing, State, War, and Navy Building, not dated, but file-marked Mar. 27, 1883, *ibid.*, 1883, no. 1600 B. The latter document should be compared, with respect to the manner of designating floors, with *ibid.*, 1882, no. 1784 A (filed with 1877, no. 4616).

turn, that the physical transfer took place, or began, sometime in October 1881, when the designation "Archive Branch" came into usage.¹¹⁶ As for the rooms in the State, War, and Navy Building into which the Office was moved, it is clear that these were the ones now numbered 362, 364, 366, and 368.¹¹⁷

Something remains to be said about the theoretical administrative status of the Archive Office from 1865 to 1881. The original order for its establishment made it a "bureau . . . in the Adjutant General's Office."¹¹⁸ The organic regulations issued shortly afterwards stated that "This office is attached to and will be under the general regulations of the Adjutant General's Bureau, and will be entitled 'Archive Office of the War Department.'"¹¹⁹ Obviously there was, according to modern conceptions, a lack of clear thinking about the status of the new office. At one and the same time it was affiliated with the Adjutant General's Office and yet considered to be something other than a part of that Office. This is borne out by the relations of Francis Lieber with his superiors, for his correspondence shows that he felt free to deal directly with the Secretary of War in many larger matters, while dealing with the Adjutant General in matters that were minor or routine.¹²⁰ The personal prestige of Lieber was undoubtedly an important factor in determining the working relationships of the Archive Office with these authorities during the time that he was at its head.

¹¹⁶A. O., endorsement book, 1865-1882, around p. 367.

¹¹⁷Floor plan, not dated, but filemarked O. S. W., document file, 1882, no. 1124 B, incl. 1, and filed with *ibid.*, 1883, no. 1600 B, with which it should be collated. This plan may be compared with modern floor plans of the building with conclusive results.

¹¹⁸General orders no. 127, Adjutant General's Office, July 21, 1865, O. R., ser. III, vol. V, p. 95.

¹¹⁹Regulations for the Archive Office of the War Department, Aug. 23, 1865, in A. O., file of "Orders and Regulations Pertaining to the Archive Office."

¹²⁰A. O., letters sent, book I, *passim*.

For the sake of neat intellectual house-keeping it is perhaps best to regard the Archive Office as a distinct bureau of the War Department up to the time when Lieber was discharged and the office was "transferred" into the Adjutant General's Office. After that time it must be regarded as an integral part of the Adjutant General's Office, although it still retained a shadow of peculiar status. Whether the transfer implied that it was no longer the Archive Office "of the War Department" is a question that did not disturb the mind of anyone at the time, the fact being that the heading "War Department, Archive Office," continued to be used on its letters and endorsements until late in 1881.¹²¹ It is perhaps simplest to consider the office as having the approximate equivalent of divisional status during this period.

Some light is shed upon this question of status by the nature of the records produced by the Archive Office during the period 1865-1881 and by the Archive Branch after 1881. Letter press books of letters sent were kept from the beginning down at least to November 8, 1881,¹²² and possibly to a somewhat later date. After removal of the Office into the State, War, and Navy Building there was, of course, no necessity for keeping any record of letters sent separate from the record kept in the Office of the Secretary. A letters-received register and a corresponding document file were also kept from the beginning down to about November 1881. An endorsement book was kept down to March 15, 1882, when it was ordered closed.¹²³ Be-

¹²¹*Ibid.*, book II, pp. 15, 174; book III, p. 270 *et seq.*, *passim*; endorsement book, 1865-1882, *passim* to p. 367.

¹²²See the note on A. O., document file, A, no. 153, which refers to a letter of the above date in a "Letter Book No. 4." There is another such reference on *ibid.*, W, no. 125. The fact that book III is filled to the last page, the last letter therein being dated June 18, 1880, also indicates that there was a subsequent letter book, but the latter has not yet been found among the records of The Adjutant General's Office in the National Archives.

¹²³Note in A. O., endorsement book, 1865-1882, p. 392.

ginning on April 15, 1882, however, the old letters-received register began to be used again as the approximate equivalent of an endorsement book—actually as a record of reports on cases—and continued to be so used until the end of 1887, when a new book was started. This was apparently the only business record continuously kept by the later Archive Branch of the Record Division, Office of the Secretary of War, and this was kept primarily for convenience, since all correspondence was regularly recorded in the registry of the Record Division. It is apparent, then, that the Archive Office maintained a small separate registry during its existence, while the Archive Branch did not. In this respect the Archive Office compared, during the period 1865-1881, with the several rather inchoate major branches of the Adjutant Gen-

eral's Office, each of which maintained a separate registry.

For our own time the history of the Archive Office should have some slight special interest because of the fact that the government of the United States has once again, in several different parts of the globe, been dealing with problems presented by the captured archives of a defeated enemy government. While the situation at the end of our Civil War was far from being closely comparable, it is possible that the story of what the Federal government did with the captured Confederate archives may be suggestive in some respects. Be that as it may, the story is one that has deserved to be told for the benefit of all students of the Civil War who may hereafter go back to the original records of that conflict.

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The Military Library

National Security and the General Staff, by
Major General Otto L. Nelson, Jr. (Washington, D. C.: Infantry Journal Press. 1946.
Pp. 608. \$5.00.)

Because the subject of this book had never received the scholarly attention it deserved it offered a magnificent opportunity to produce a work that would be a landmark of American thought about government, in peacetime as well as during war, and about governance outside of government. Alas, however, this book is an exceedingly mediocre work that will almost surely do a disservice to such thought. For it will enable a great many academic sciolists in the field of "public administration" to profess mastery of a subject of which they will have no real grasp.

My first criticism of this book has to do with the way in which it is put together. The author should have made up his mind whether he was trying to write a composition of his own or to edit a collection of source materials. What he has done is something that was considered out of order even in undergraduate term papers at every academic institution with which I have ever had any connection: he has strung together the texts of many long source documents and numerous quotations upon a thin narrative thread of his own spinning. According to my calculations over 45 per cent of the text consists of matter in quotation marks, while an appreciable additional part obviously consists of matter paraphrased or adapted from official documents. Presented in this way, much of this material is painfully dull even to one intensely interested in the subject. More important, however, is the fact that this mode of presentation is vicious in its effect on the innocent mind of the uncritical reader.

Let us consider, for example, the story of the establishment of the General Staff Corps during the secretaryship of Elihu Root. Nelson covers this story in his third chapter, which contains according to my count 1327 lines of text. Of these, 728, or 55 per cent, are within quotation marks. And of these, in turn, 654, or 49 per cent, are quoted from materials prepared at the time or



OTTO L. NELSON, JR.

later by participants in the course of events. Thus there are long quotations from Root's annual reports of the time and from William H. Carter's "personal narrative" written and published in the 1920's. Such quotations are a principal means of explaining what the situation was that led to the creation of the General Staff Corps and often contain the only mention made of very important facts or factors. Yet the persons quoted, being involved in the situation to be described, all had axes to grind, either in the public interest or selfish interest.

In attempting to answer the question "What led to the creation of the General Staff Corps?" no responsible historian would accept testimony of the witnesses without examining into the credibility and competence of each. When he prepares an exposition of what happened his statements are

supposed to be based *at every point* on a careful appraisal of his witnesses and their evidence. His exposition therefore has a *prima facie* validity in the same way as any mass of jury verdicts. To interject, into what purports to be such an exposition, a large proportion of quoted testimony of witnesses and to use such testimony in large part to take the place of the writer's own exposition is a failure to discharge the writer's responsibility to the reader, for it makes it almost impossible for the reader to keep clearly in mind what facts are guaranteed by the writer and which are merely alleged by witnesses without comment from the writer. What Nelson has done constitutes a failure to discharge an historian's responsibility for criticism of his sources, and it creates a presumption that this failure also underlies those parts of this work that are presented in his own words.

Let us turn for a specific instance of irresponsibility to Chapter V, which is entitled "The Test of World War I—1916-1919" and which is made up to the extent of about 78 per cent of quotations from materials prepared by participants in the course of events. This chapter tells about the decision of Secretary Newton D. Baker that nullified in effect the provision of the National Defense Act of 1916 restricting the general staff to nonadministrative duties. Secretary Baker is allowed to plead his own case and thus to appear as the savior of the general staff idea from Congressional attack. Yet the esteemed mentor of the Congressional committee that prepared the National Defense Act of 1916 was Maj. Gen. William H. Carter, Retired, the man who had been the military brains behind Root's creation of the General Staff Corps in 1903!¹ And Colonel (later Brigadier General) John McAuley Palmer, whose opinion is weighty, felt obliged to admit in 1919 that Secretary Baker, in making that decision, had shown a false notion of what a general staff should be.² There is no suggestion from Nelson in his presentation of this episode that there is any possibility of an historical judgment that Baker was in the wrong. The anti-Congressional Uptonian "party line" is followed perhaps unconsciously but nevertheless insidiously by means of one-sidedness in the quotation of sources. And the reader doesn't

have a chance.

It is difficult to understand how the author could have received the academic training his degrees from Columbia and Harvard signify he did receive and not have been made to appreciate that the aggregation of materials in scissors-and-paste fashion does not constitute the practice of scholarship. Indeed, it is difficult to understand how the first part of this book could have been accepted as a doctoral dissertation at Harvard in any version similar to that now published. Unless, of course, the demonstration of a capability for critical synthesis has lately passed out of fashion as a requirement for the doctorate. If the publication in *extenso* of the various documents reproduced in the text was felt to be a service to scholars—even though most of the documents for the period before 1941 were published and readily accessible—the scholarly thing to have done, and the humane thing, would have been to put them in appendices.

My second criticism of this book is that it is not a significant contribution to the science of administration. It is a work of administrative history, and in the lack of any significant derivative contribution to the theory of administration ought to be judged for its historical scholarship.³ There is indeed a fairly assiduous attempt to show familiarity with academic theory in the field of "public administration." At one point or another there is genuflection before most of the little shrines of that field.⁴ But the basis theoretic capital of this new field of academic imperialism is so microscopic that the author is hard put to it to point out any larger significances of his facts. Chief reliance for giving the work a coloring of specialized learning is placed upon recurrent interjection of references to the theory of "span of control," the statistical basis of which is so comfortable in suggesting mathematical or scientific foundations for the field of "public administration." References are also made to the "scalar," "functional," and "line and staff" forms of organization—another sure indication of the unoriginal, union-card worker in the field of "public administration."

So far as I have been able to perceive, the author has advanced only two ideas that are presum-

¹House Committee on Military Affairs, *The National Defense: Hearings . . . Sixty-Ninth Congress, Second Session*, Part 1: "Historical Documents Relating to the Reorganization Plans of the War Department and to the Present National Defense Act" (Washington, 1927), pp. 566-67.

²*Ibid.*, p. 352.

³Nelson disclaims that his treatment is historical but the alleged peculiarities of his work on which he bases this disclaimer are characteristic almost unavoidably of all historical writings. His work will be read and used as history and he should have realized as much.

⁴For example, Luther Gulick and L. Urwick's *Papers on the Science of Administration* (New York, 1937).

ably his own and that might be considered to be contributions to the theory of administration as an art or science. One of these is the notion of "pride of place" as a force at work to counteract any efforts to diminish or restrict the span of control of top management. The other is the notion that the "special staff" (a bastard concept!)⁵ ought to be composed of administrative agencies that offer techniques of control particularly needed by top management. These are not sufficiently important contributions to theory to warrant this book being considered as anything but administrative history.

Now the writing of history has been established as a rigorous scholarly discipline in this country since Herbert Adams began in 1876 to conduct historical seminars at Johns Hopkins University. And although the rigor of this discipline may possibly have deteriorated in recent years, its standards are still not sufficiently decayed to admit of this book being considered a scholarly piece of historical writing.

One of the tests that historical scholarship applies in the evaluation of historical writings is the degree to which the facts deduced from study of sources are related to the previous store of human knowledge. To do this in any sufficient degree requires extensive background knowledge of a relevant sort. In the case of this book there is no evidence that the author has any such knowledge.

My third criticism of this book, therefore, is that, judged as a work of history, it fails to show any signs of background knowledge in political science, general history, historical sociology, or the history of military institutions in particular. Perhaps I can best indicate what I mean by referring

to some works that do show a respectable background knowledge, such as Edward Mead Earle's *Makers of Modern Strategy* (Princeton, 1943), Alfred Vagts' *History of Militarism* (New York, 1937), Bernard Brodie's *Sea Power in the Machine Age* (Princeton, 1941), J. D. Hittle's *The Military Staff, Its History and Development* (Harrisburg, 1944), and the now most unfortunately neglected writings of Professor Robert Matteson Johnston, particularly his *Arms and the Race: The Foundations of Army Reform* (New York, 1915).

To consider only the narrower requirements of background, there is no indication that the author of this book has any knowledge of the development of the general staff institution in western civilization before 1903 or in any country other than the United States after 1903. There is thus no indication that he has any knowledge of the nature of the institution other than what he has derived from published documents about the history of the American general staff and from his own experience. This is a serious criticism, for it may legitimately be argued that the American military mind has never understood the general staff institution, except for a fleeting grasp of the French system in the A. E. F. and at the time of the reorganization of the War Department General Staff by the Harbord Board in 1921. Thus John McAuley Palmer, a member of that board and probably the greatest general staff officer this country has ever had, testified in 1919:

I am perfectly satisfied that one of the principal causes for the confusion of thought in regard to a General Staff is that very few people know what a General Staff is. That is true in civil life; it is true in the Army; and it is also true in the General Staff itself.⁶

And the fact that the War Department General Staff in World War II should have had to call to its aid the pretentious but relatively vacuous viewpoint of the field of "public administration" is a definitive indication that it was out of touch with the kind of military thought that had produced and developed the general staff institution. One might expect this in a new military medium such as the air forces but not at first thought in the traditional ground forces.

⁵This term was interjected into War Department organizational nomenclature by its appearance on one of the charts accompanying the circular announcing the War Department reorganization of March 9, 1942. It was apparently borrowed with change of meaning from the scheme of staff nomenclature set forth in the *Staff Officers' Field Manual*, the first edition of which appeared in 1928. Prior to the publication of this manual staff officers or agencies not included in a general staff were normally referred to as constituting the "administrative" and "technical" staffs. Nelson uses the term "special staff" from the beginning of his narrative and in such a way as to leave the impression that it represented a well-recognized concept from the time of the establishment of the General Staff Corps in 1903. In so doing, however, he uses the term in the broad, "non-general-staff" sense of the *Staff Officers' Field Manual* and not in the more restricted sense that is the only sense in which the term has been applied in the War Department proper. Existing semantic confusion is thus confounded.

⁶Statement in hearing before Senate Subcommittee on Military Affairs, Oct. 10, 1919, reprinted in House Committee on Military Affairs, *The National Defense: Hearings . . . Sixty-Ninth Congress, Second Session*, Part 1, p. 340.

It is exceedingly difficult to transfer an intangible institution such as that of the general staff from one national culture to another unless the same favoring conditions are at work in unusual degree. That was not the case in connection with the establishment of a so-called general staff in the United States Army. The American military and civilian mind readily understands the idea of a "top-management staff" and the idea of "planning" as an activity carried on in the way in which an architect plans a building or an engineer plans a construction job. It does not, in spite of lip service to words representing the ideas, readily understand the idea of an "outgeneralling-the-enemy staff" and the idea of "executive preparation through practice in simulated situations."

There is only one way in which to conceive of a general staff and that is as the antagonist of an opposing general staff. This is exactly the way in which players and spectators think of two opposing football teams. A general staff is a mental football team. In preparation for war it indulges in practice and runs through plays against simulated opposition in the same way as a football team. In war its job is to break open the enemy's defenses by mental teamwork in calling and running the best play in each given situation. In time of peace at the national level one can always tell a true general staff by the status it gives to work of the related "historical section," because projective realism is of the essence in its activities. And in time of war at any level one can always tell a true general staff by the form in which orders or directives are issued, because thoroughness of peacetime preparation for war is thereby reflected.⁷

The reason why the general staff idea is not readily understood by the American mind lies in the fact that the United States, even down to date, has never had to live in body-to-body contact with neighbor states as treacherous and instantaneously deadly as so many tigers.⁸ All our wars, even the last one, have been planned or replanned after we have gotten into them. Because of the distance factor we have enjoyed a wide margin of

safety in terms of time, which has meant that public policy has never been ready to commit itself to any extensive preparation on the part of our national life and hence not very fully to any one detailed pattern of preparedness. Application of the general staff idea at the national level in time of peace is thereby made nearly impossible, for the usefulness of any plans is dependent upon ability to forecast one's own means, as well as the enemy's, with some accuracy. In spite of all the talk about the general staff idea, therefore, it is practically incomprehensible at the national level in time of peace to the American mind that is lacking in specialized historical and sociological knowledge about general staffs in other countries. Hence the strong gravitational pull at this level of typical American modes of thought about staffs and planning, including the modes of thought of the field of "public administration."

This tendency at the national level to relapse into folk modes of thought has been reinforced, paradoxically enough, by the fact that since John F. Morrison began to teach at Leavenworth in 1906, the American military mind has developed a very robust comprehension not only of the applicatory method for developing tactical skill but of the general staff idea in relation to combat commands. The result has been such a concentration upon developing personal capability for participation in the direction of combat operations that for the whole period between the two World Wars it was next to impossible to interest the officer corps of the Army in any broad thinking about preparation for conducting war at the national level or about the art of war at the national level. There was a wonderful development in the utilization of military history at the "little picture" level and almost complete disregard of military history at the "total picture" level.⁹ The study of military history as Arthur L. Conger and Robert Matteson Johnston taught that it should be studied became practically a lost art in this country. Consequently, comprehension of the general staff idea at the national level slowly withered away as more and more historical ignoramuses replaced their elders in higher and higher quarters.

⁷With all due respect to Elihu Root and William H. Carter there is no exposition of the general staff idea by an American that is comparable in breadth and depth of understanding to that given by John McAuley Palmer at the hearing referred to in the preceding footnote.

⁸Anyone who wishes to obtain an elementary grasp of the principal factor that molded the development of European general staffs should read Edwin A. Pratt, *The Rise of Rail-Power in War and Conquest* (London, 1915).

⁹The interest in military history at the "little picture" level is well illustrated by *Infantry in Battle* (3d ed., Washington, 1939), which was originally prepared at the Infantry School under the direction of General (then Colonel) George C. Marshall, while the highest level generally reached in interest in military history is illustrated by Charles A. Willoughby's *Maneuver in War* (Harrisburg, 1939), which was originally prepared at the Command and General Staff School.

Perhaps nothing illustrates this better than the story of the setting up and abolishment of GHQ at the beginning of World War II. The scheme for this was one adopted from European practice and was provided for originally at the time of the reorganization of the War Department General Staff by the Harbord Board in 1921. The men who interjected this scheme into our plans understood it because they knew something of its history. The men who applied the idea at the beginning of World War II obviously applied it by rote in a situation where it was inapplicable and thus got themselves into a major organizational mess and a potential political mess of major proportions.

It seems apparent to me that the reorganization of March 9, 1942, marked an almost total loss of grasp of the philosophy and the historical sociology of military executive institutions and a starting all over again from scratch—or with what the reorganizers had learned from their own education and experience, from observation, and from indoctrination with contemporary civilian notions. This was not alarming in time of war, for native wit under the terrific pressure of war learns to improvise institutions with great rapidity to meet the test of war. Yet it is not likely that native wit will lend any adequate understanding of the institutions it has created after it has created them, and for this reason it is a matter for alarm for the present period of peace that contact should have been so largely lost with the lore that armies accumulated in the last hundred years or so with respect to military planning and control. The air force has been and is likely to continue to be the bull in the china shop. It is usually right, but by instinct rather than by dint of theoretical understanding. Since instinct is something not easily capable of conscious perpetuation, this bodes ill for future understanding.

My fourth criticism of this book is to the effect that it reflects serious limitations of the source materials used. I shall not chide the author for not having used the archival materials that exist, for that would perhaps be unreasonable. But for the period prior to the beginning of his own experience on the War Department General Staff he has relied on only the more obvious published sources and not all of those. Thus he relies heavily on the annual reports of the Secretary of War down through 1919. Beginning in 1921 the detailed reports that had previously been published were replaced by summary reports. Apparently for this reason Nelson misses entirely the climactic significance of the replacement of March by Pershing as

Chief of Staff in 1921 and of the immediate reorganization of the War Department General Staff in accordance with the report of the Harbord Board, appointed by General Pershing. Apparently Nelson has never read the minutes and report of this board, although they were published as long ago as 1927.¹⁰

The history of the War Department General Staff *per se* during the eighteen years 1921-1939 Nelson dismisses in about twice that many lines. Certainly if he had known of its existence he would have included *in toto* the basic manual entitled *A Handbook for the War Department General Staff* (Washington, 1924), prepared in 1923 under the direction of General Pershing as Chief of Staff. Perhaps it would be expecting too much to expect an account of the origin of the Historical Section that was transferred to the Army War College in 1921 or of what happened to its program and why. Yet this was of key importance, because whatever greatness continental European general staffs have attained has been founded on the work of their historical sections, which have been long-standing institutions.¹¹ Published information on the program and activities of the Historical Section has not been wholly lacking.¹² Perhaps it would be expecting too much to expect any account of what happened after World War I to the Army War College, which had been the guts of the War Department General Staff before the war, or any account of evolving teachings at other army service schools with respect to the organization and exercise of command and staff responsibilities in the field. Yet such teachings were bound to permeate to the top in the long run and influence thinking about the organization and exercise of comparable responsibilities in the War Department. And the *Staff Officers' Field Manual* (Washington, 1928; 2d ed., 1932-33; 3d ed., 1940-41), embodying the officially accepted doctrines, was available as a publication.

Nelson sometimes uses Congressional documents, and he uses quite extensively the autobiographies or reminiscences or commentaries of characters involved in his story. It is apparent, however, that he made no systematic examination of

¹⁰House Committee on Military Affairs, *The National Defense: Hearings . . . Sixty-Ninth Congress, Second Session, Part 1*, pp. 568-648.

¹¹Historical sections were set up in Prussia, 1816; Austria, 1818; France, 1822; Russia, 1836.

¹²See Elizabeth B. Drewry, *Historical Units of Agencies of the First World War* (National Archives Bulletin No. 4, Washington, 1942), pp. 7-13, and the publications there cited.

various types of War Department issuances such as general orders, circulars, supply circulars, army regulations, special regulations, training manuals, etc. As a result Nelson has missed important items. One such item is the valuable pamphlet entitled *General Staff Corps: Laws, Regulations, Orders and Memoranda Relating to the General Staff Corps* (Washington, 1912). Another such item is general orders no. 31, A. E. F., February 16, 1918, which embodied the ripened experience of the A. E. F. and its fuller acquaintance with the French system and which furnished the rough archetype of our post-World-War-I general staff. Still another such document is the *General Staff Study on Staff Organization and Principles* (War Department Document No. 858, Washington, 1918), prepared in the War Plans Division of the War Department General Staff. This is important for its attempt to set forth the philosophy upon which all staff organization is based and the philosophy of the general staff in particular. Related to this document is the booklet *Staff Work Charts Nos. 1-7 Incl.* (Washington, 1918), also prepared in the War Plans Division.

My fifth criticism of this book has to do with its failure to focus adequate attention on the two biggest perennial problems of American military policy. First, how can necessary military efficiency be achieved in time of peace under a Constitution that departs from the military principle of unity of command by giving the President command of our army and Congress command of the national resources for raising and maintaining that army? Second, shall the national aversion for military service combine with the self-interest of the military professionals to give us the policy of maintaining an expansible regular army or shall a public opinion educated to the evils and dangers of that policy insist upon the policy of maintaining a citizen army built up on a framework of professionals?

The first of these problems implies a predicament for a general staff at the national level or, for that matter, any war planning at that level. This predicament is the familiar one of having responsibility without commensurate authority. On the one hand the War Department is dependent for means upon a deliberative body that has no great technical competence to understand needs and that shares the strong inclination of the mass of human beings to be improvident. On the other hand the War Department is held responsible in the public mind for obtaining and disposing properly of adequate means for the national defense.

The exact arrangement in relation to each other of the human levers through which resistance and pressure is exerted on a general staff is important perhaps but not nearly so important as fuller realization on the part of Congress and the public of this predicament of the general staff. This book ought therefore to have made fuller inquiry into the age-old difficulties between the former office of Commanding General of the Army and the Secretary of War and fuller inquiry into the difficulties that have been experienced in relations between the War Department General Staff and Congress in order that the book might have been of greater service to those who want to understand such a basic problem. Here was an extraordinary opportunity for brilliant writing in the fields of political science and constitutional theory.

The second of the two problems that I have stated is closely related to the first. For as long as competence in military affairs is left to be primarily a monopoly of a separate military caste it will be next to impossible to resolve the first problem. The American public has little realization of the fact that our Uptonian military policy is closely similar to that traditional in France and that it can have the same sad consequences as in France now that the possibility of our country being suddenly and overwhelmingly attacked are not so remote as they used to be. As in France, the regular army has—in good faith, be it said—carried on a ceaseless, insidious, and very effective propaganda in favor of the Uptonian policy. But by so doing it sinks itself more and more deeply into the predicament indicated in the preceding paragraph. In this predicament it is forced to have recourse, in attempting to obtain necessary means and authority, to overawing Congress and the public through a technical esotericism built up to the highest possible point of prestige. For this purpose the awesome term "General Staff" is very useful and is accordingly extended in application into administrative areas far beyond its proper referent. Here again is a basic problem to which Nelson gives no adequate attention.

If the army is to be freed of all suspicion of possible chicanery, or, alternately, of stupidity, it should dramatize its problem of central planning and control by using a terminology that reveals rather than disguises reality. The term "Chief of Staff," which is so vicious in its studied ambiguity, should be replaced by some such term as "Deputy Commander-in-Chief and Assistant Secretary of War." The term "War Department General

Staff" should be restricted to the Operations Division, formerly the War Plans Division, and the head of that organ should be entitled "Chief of General Staff" and have corresponding national prestige. The remainder of the War Department General Staff and Special Staff should be redesignated by some such term as "Ministerial Staff" or "Executive Staff" and reorganized accordingly. Here, incidentally, is the proper area for application of whatever the science of administration has to contribute.¹³

As Nelson himself points out, there has long been cogent criticism of the philosophy of our general staff in relation to its practice. Yet he nowhere either accepts the challenge or the argument of that criticism. He admits in various places that the philosophy of our general staff has never been adequately clarified, yet he makes no major attempt to clarify that philosophy. The old "arms and services" having been reorganized to take excessive pressure off the Chief of Staff, he sees no big basic problem remaining unresolved with respect to the organization of the so-called "general" and "special" staffs of the War Department. He is concerned only with elevating our present, essentially schizophrenic institutions at this level on up to the highest possible level. Otherwise he is basically satisfied with "things as they are." Perhaps he realizes that the way of the thinker who goes beneath superficialities is likely to be a hard one.

These are my major criticisms, but I could go on indefinitely pointing out inadequacies and infelicities that indicate the author's lack of ripeness and depth as a scholar and philosopher. Thus his book might have been improved a thousand per cent if he had had the helpful criticism of a sound scholar with specialized competence in the field of military studies, such as Major Harvey A. DeWeerd or Lt. Col. Jesse S. Douglas. But it was not to be. And so, in response to the remark on the inside of the dust jacket that "There is no

other book of its kind," I will sum up my criticism by saying "Thank goodness!"

DALLAS IRVINE,*
Washington, D. C.

Government Control in War, by the Right Honourable Lord Hankey, with a foreword by G. M. Trevelyan. (Cambridge, Eng.: Cambridge University Press; New York: The Macmillan Company. 1946. Pp. 88. \$1.50.)

No one could be better qualified by experience than Lord Hankey to discuss the development of the governmental machinery by which the military services and civilian agencies of the United Kingdom are coordinated for the defense of the Empire and the prosecution of war. He has served for nearly forty years as secretary of the Committee of Imperial Defence, secretary and member of the Cabinet and War Cabinet, and secretary of the Chiefs of Staff Committee. During that time he played an active part in developing the machinery and has seen it tested by two wars; he has also studied it thoughtfully in an effort to discover basic principles of administration. Lord Hankey presented his observations as the Lees Knowles Lectures at Trinity College last year, and they have now been made available in this diminutive volume. In so far as it is an historical account of the Committee of Imperial Defence, it contains much the same information he gave in a lecture at the University of London nearly twenty years ago,¹ but its significance does not lie simply in bringing his previous remarks up to date. The present treatment is more philosophical in concept and is presented with greater perspective; as Mr. Trevelyan says, it is an important contribution to British constitutional history. It has an additional significance for us in that it deals with a level of administration which, greatly as it is needed, has no adequate counterpart in this country.

The Committee of Imperial Defence was given formal status in 1904 after ten years' experimentation and has existed ever since under various names—War Council, Dardanelles Committee, War Committee, and War Cabinet in the last war; War Cabinet and Defence Committee in this one. It is in quite a different position and exists for an

¹³Since the foregoing was written another reorganization of the War Department has been directed by circular no. 138, War Department, May 14, 1946. This latest reorganization is very conservative, but within the limits of its conservatism it shows a quality of thought greatly superior to that shown by the previous reorganization. The circular directing the latest reorganization is an expertly prepared state paper quite in keeping with our better traditions of military statesmanship; whereas the circular directing the earlier reorganization is one of the most amateurish and *gauche* documents of basic importance ever to issue from the War Department.

*See "Among Our Contributors" on the inside front cover of this issue.

¹Lt.-Col. Sir Maurice Hankey, "The Origin and Development of the Committee of Imperial Defence," *Army Quarterly*, XIV (July 1927), 254-73.

entirely different purpose than our Joint Chiefs of Staff, which is more nearly comparable to the British Chiefs of Staff Committee created after the last war to counsel the Committee of Imperial Defence on military matters and to develop inter-service plans. The Committee of Imperial Defence is the creature of the Cabinet, to which it stands in an advisory capacity at a level between the Cabinet and the government departments. Composed mostly of civil ministers, although it also has military representatives, it brings together through its membership and permanent subcommittees the knowledge and problems of not only the three military services but of all the important agencies concerned with defence. Consequently it can work out and present to the Cabinet for decision comprehensive plans and policies which integrate all the resources required by war. Particularly noteworthy is the fact that such a body exists for planning in time of peace as well as during wars, and it seems to follow that emergency agencies have generally been extensions of permanent organizations rather than entirely new. Besides the continuity of policy thus provided, the author stresses the importance of having the Prime Minister as chairman of the Committee of Imperial Defence and of having a highly trained secretariat to handle administration and keep adequate records.

In the midst of the heated controversy which once again rages over organization of this country's military services, and with such impetuous publications as Mr. Ingersoll's *Top Secret* and Mr. Huie's *The Case against the Admirals* adding to the confusion, it is extremely timely to have this judicious summary of British experience to help us see the problem under discussion in perspective. The reader who is looking for a simple answer to the question of whether we should have one, two, or three services will not find it here, but one cannot read Lord Hankey's lectures without wondering if that question is as important as finding some means to provide adequate coordination between the armed forces and the rest of the government. No matter how the military services are organized, the larger problem remains to be solved. Admiral Mahan pointed out in one of his essays on naval administration that there are differences between the British form of government and our own, especially that in the United States administrative responsibility is vested in individuals, ultimately in the President, whereas in the United Kingdom it reposes in committees. Nevertheless, they are similar in many respects and iden-

tical in adhering firmly to the principle of civilian control of the military establishment. The problem of administrative organization for defence is therefore fundamentally the same for both nations. We do not have to—indeed, we should not—adopt the British machinery, but there is much to be learned from studying the more developed system. There is no better place to start than with this thought-provoking synopsis of the manner in which it came about and operates.

JESSE S. DOUGLAS,*

Washington, D. C.

The Navy: A Study in Administration, by Secretary James Forrestal, Admiral E. C. Kalbfus, Robert G. Albion, Lieutenant Commander R. H. Connery, Admiral F. J. Horne, Admiral S. M. Robinson, Donald R. Belcher, Vice Admiral E. L. Cochrane, Rear Admiral William J. Carter, and Lieutenant Duncan S. Ballantine. (Reprinted from *Public Administration Review*, Autumn 1945 issue. Public Administration Service Publication No. 95. Chicago, 1946. Pp. 64. \$1.00.)

This series of articles, under the general editorship of Lieutenant Commander Robert H. Connery, assisted by Lieutenants Elting E. Morison, Paul J. Strayer, and James Colvin, all of whom have been working in the Navy's historical program, provides an encouraging foretaste of the administrative history of the Navy Department during World War II which is currently in process of preparation. To many who may never find the opportunity to study the longer histories, these articles, brought together in convenient pamphlet form, will provide a quick means for securing an overall picture of the main features of naval administration.

How far some of the essays represent the actual writing of the highly placed officials whose names they bear, or how far they represent the efforts of able subordinates, the reviewer dare not endeavor to guess, but there is in many of them a welcome measure of candid appraisal which adds greatly to the value of the factual material they contain. Possibly much more that might be said remains unsaid, but the critical approach is prominent enough to add greatly to the reader's understanding of how certain aspects of naval administration

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really worked.

After brief introductions by Secretary Forrestal and Admiral Kalbfus, Dr. Robert G. Albion opens the series of main articles with one on *The Administration of the Navy, 1798-1945*. Not only does Dr. Albion give, as one would expect of him, an excellent and penetrating picture of the development of the general pattern of naval administration during the course of a century and a half, but he puts his finger on some of the more critical problems of national defense administration which face us today. Through his account one becomes aware of the influence upon the administration of the Navy Department—and the same factor is apparent in the War Department—of the absence in this country of an adequate body of top level civil servants. As a result, administration has to a large degree been taken over by officers trained originally for combat duties. Whether a certain cohesion in personnel and policy which springs from this development is sufficient compensation for the placement of officers in positions for which their background is somewhat meagre is a question about which opinions will differ.

Two other problems brought up by Dr. Albion deserve particular notice. He reminds us of Admiral Mahan's dictum that, "No man can run it (the Navy Department) and the Presidency together," and then points out that both Franklin D. Roosevelt and Theodore Roosevelt very largely did so. Whether, in the particular circumstances, their intervention was salutary or not will long be debated, but the growing tendency to resolve top level problems of defense policy in the White House, although almost inescapable under existing administrative arrangements, is not without grave dangers. Dr. Albion also points out the importance of the fact that the bureaus have statutory existence, whereas the various coordinating agencies which have been set up within the department from time to time have usually been without that authority. Although that does not place particularism in an absolutely invulnerable position, it does give it a strength which enables it to survive occasional moments of weak leadership, whereas the authority of the coordinating bodies, which must be maintained without the assistance of fixed positions, melts away rapidly if the leadership is not strong.

Commander Connery's article is entitled *Organizing the Navy's Industrial Mobilization*, although it is devoted more to the organization of naval procurement in the strict sense than it is to the broad field of industrial mobilization. Perhaps

this is not surprising for, even after the formation of the Army and Navy Munitions Board in 1922, the Navy played a distinctly secondary role to the Army in planning for industrial mobilization. This was largely a product of the fact that the Navy, on the basis of previous experience, had not expected to face such critical problems of expansion as had the Army, and also—which it might have been well to mention—that in 1920 Congress placed upon the Assistant Secretary of War the direct responsibility for planning for industrial mobilization.

Admiral Horne, in his article on *Naval Logistics Administration*, points out that the three keys to logistics are timing, motion, and selection. He brings out very effectively the great variety of lead times necessary to bring balanced supply to bear upon a certain point at a certain moment, and gives an interesting picture of the Navy's development of the *Functional Component Catalog* as a means of solving the problem of selection.

Admiral Robinson, in his article on *Procurement and Production*, emphasizes the importance of the development of statistics in program control. The Office of Procurement and Matériel, whose growth and activity he describes, appears to have been in reality what is often called a "control division," in which the gathering of statistical information and the exercise of appropriate controls were joined together in one organization.

The role of statistics is explored further in Donald R. Belcher's *Statistical Controls*. Mr. Belcher, in private life the Treasurer of the American Telephone and Telegraph Company, was brought into the Navy Department to develop its statistical system. His description of what he found is particularly valuable, not only because of its candor, but because of the intimacy of touch of the man who himself tackled the job he is describing.

Admiral Cochrane's article on *Shipbuilding* describes the physical and technical task of the Bureau of Ships but contains rather less of the peculiar administrative problems which the bureau had to solve than is found in the other articles of the series. A little too much space is devoted to problems which, although felt acutely by the Bureau of Ships, were not peculiar to it.

Admiral Carter's article on *Supply Policies* will be the hardest reading for one not thoroughly familiar with the administration of naval supply. In dealing with problems of stock control it makes more use than do most of the other articles of technical terms and lacks the two or three penetrating paragraphs—which some of the others have

—which would put the essentials of the problem in layman's language.

The final article, that on *Naval Transportation* by Lieutenant Ballantine, is distinguished by an eminently fair picture of the problems involved in the relationship between the Navy and the War Shipping Administration. He sees clearly that it is not always possible to give direct operational requirements complete precedence over the indirect requirements of war.

Two general criticisms of the series may be of value. It would have helped the non-naval reader to have a chart—or charts—of the overall administrative structure of the Navy Department. Secondly, quite a little space might have been saved if the various authors had known more precisely what the others were going to do. Because they evidently did not, several topics, such as contractual procedures, are gone over two or three times. If the amount of space required for these several very condensed accounts could have been devoted to one, more adequate analysis, the reader's understanding of some of the Navy's business problems would have been measurably increased.

TROYER S. ANDERSON,*
Washington, D. C.

Armies and the Art of Revolution, by Mrs. K. C. Chorley. (London: Faber and Faber, Ltd., 1943; Long Island, N. Y.: Transatlantic Arts. 1945. Pp. 274. \$3.75.)

It has always been "a dangerous and an anxious task," says Mrs. Chorley, "to fit professional fighting forces into the body politic"; and she goes on to say that "the theory of the impassive military instrument is in fact most vulnerable in practice." Professional military men do hold political beliefs and in history have often acted upon them.

Rebels must usually fight at technical disadvantage against the better equipped and more professional forces employed against them. This is more true of an internal revolt than of a nationalist revolt. Mrs. Chorley analyzes a number of insurrections to bring out these points, among them the American, French, and Russian Revolutions.

Unsuccessful revolutions "may alter the political situation so deeply that from a revolutionary

standpoint they may be a valuable factor in long-term strategy, even though foredoomed to military failure." Rebel forces may win against professional armies. Mrs. Chorley cites the Irish Revolution, the American Revolution, and Garibaldi's Sicilian campaign in this regard, but finds that certain conditions are necessary to give such a war a fair chance of success: limited use of the opposing army; general sympathy for the rebels; close control of the insurrectionary forces; and conduct of rebel operations over a long period to wear down the civilian and military morale of the other side.

"The striking power of an existing government can be paralyzed by fear of disaffection, a method likely to operate through the officers rather than the rank and file," Mrs. Chorley further states. There is a distinct possibility that the professional officers' corps may be the center of a fascist revolt, and the "unbridled power of an officers' corps under a weak government" brings "danger of political anarchy." A leftist revolution has to rely on disintegrating the rank and file politically which is much harder to do than to organize a rightist revolution through an officers' corps. An unsuccessful war, more than anything else, sets the scene for disintegration of the rank and file. In the past the leftist forces have taken such opportunities, but rightist movements, Mrs. Chorley believes, may also take them after World War II.

Disaffection may also come from grievances within the ranks. Mrs. Chorley says that "the soldier, once he has been drawn into the closed circle of interests of a professional military system, is apt to lose all sense of being a free and thinking citizen of his country. . . ." But it follows that "the establishment of close contacts between the army and the civilian population is a method for making the soldier sensitive to his particular . . . grievances. It is also the only method for keeping him politically alive. . . ." Shrewd rightist leaders try to keep the troops ignorant of civilian points of view.

In discussing the political character of armies, Mrs. Chorley quotes Tuchachevsky as follows: "The political structure of an army is determined on the one hand by political aims which it pursues, and on the other by the recruiting system which it employs." A long-enlistment force is "the surest defense for a conservative regime." A good militia, for example, the Swiss army, is not a similar threat.

In conclusion, the author insists again that modern armies "are not set apart from politics."

*Dr. Anderson, long a student of military history, is at present historian of the Office of the Undersecretary of War. His picture was published in the last issue of this magazine (p. 333) in connection with an announcement of his election as a trustee of the American Military Institute.

This comes to the fore when a marked internal division occurs within a nation. But "owing to the immense technical superiority of trained and fully equipped troops . . . no revolution will be won against a modern army when that army is putting out its full strength against the insurrection." This seems a most important finding if we apply it to a possible United Nations force for use against rebellious nations.

The author also suggests that reforms are needed in the British army to make it a more cohesive body politically, less in the hands of the conservative elements. The old theory is not true, she insists, that "leadership is a gift which has been exclusively bestowed upon the upper classes." All should have a chance at promotion.

Though much that Mrs. Chorley writes shows an intelligent analysis of armies in revolutions, it is the British army that is chiefly in her mind as she attempts to look into the future. It is remarkable that she could expect to say so little in such a study about the American army, an army that has twice in three decades risen from weakness to might and settled, at least for the moment, the affairs of the world. Mrs. Chorley's book is that of a thorough student of the political rather than the military.

JOSEPH I. GREENE,*
Washington, D. C.

Foundations of National Power: Readings on World Politics and American Security, edited with introduction and other original text by Harold and Margaret Sprout. (Princeton: Princeton University Press. 1945. Pp. 784. \$4.25.)

"If we regard things instead of words, it is clear that the term 'power politics' is what the grammarians call a 'redundancy.' The simple fact is that politics is inseparable from power. States and governments exist to exert power, for the maintenance of order, the administration of justice, the defense of the community against aggression. . . . Power . . . never vanishes. If you do not wish to retain or wield it, somebody else will. You may feel the effects of power as a passive recipient; you may deal with it as an active agent. . . . Political power exists in the world and will be used by those who have it—for good ends we hope, but

at all events for some ends." These words of the late Carl Becker would be a fitting motto for this excellent and instructive volume. As was pointed out a year ago by Professor Sprout himself, the university course for which the present book of readings was prepared might have been called "foundations of international politics," or "basic factors in international relations," instead of "foundations of national power." Either of these titles would more accurately reflect the contents of the book, although the editors were, of course, entirely justified in retaining the label that has come into common usage. Whatever the name, the volume constitutes an inexhaustible source of pertinent information; it will undoubtedly become an indispensable book of reference. It is not one of its least merits that it reproduces some texts which may be considered as classics of modern political literature.

The selections were made from the writings of almost a hundred authors, the list of whose names reads like a who's who of American political science and geography. Contributions of first-class British and French scientists were included. The editors, who wrote luminous introductions to the various chapters, also contributed a great number of original articles; although some of these filled gaps caused by the nonexistence of suitable texts, they belong to the best materials in the book—and this is intended to be a highly complimentary statement.

The book is divided into five parts: bases of international politics; the European realm of the Great Powers; the Afro-Asian realm of rival imperialisms; the American realm between Europe and Asia; foundations of peace and a new world order. The first part deals with the theory of power and foreign policy, as well as with the material, technological, demographic, and moral elements of power and power differentials; with the geographical conditions of power; and with land and sea power. The importance of technology is duly stressed: for example, while only twice as many persons were employed in the United States as in Britain, total output was several times greater. The error of the widespread opinion that radical enthusiasm is a reliable basis of strong morale is bared. The limitations of the theory that crude manpower is indicative of overall military strength are pointed up; the reader is reminded that the skill and organization of the population may be of greater consequence than mere numbers. (In a later chapter India's weakness is correctly explained by her excessive increase

*Colonel Greene, infantryman, has made manifest his interest in and perspective on problems of military history in his able editing of the *Infantry Journal* and of the *Infantry Journal Reader* (New York, 1943).

in population.) Two sections are devoted to the relative merits of the doctrines of Mahan and Mackinder. The editors repeatedly emphasize the importance of air power (for example, by explaining that "the heavy bomber largely cancelled out . . . the advantages which Germany previously derived from its central position"); yet they omitted discussing air power in this connection, although the relationship between land and sea power was fundamentally changed by the emergence of strategic air power.

The second, third, and fourth parts of the book are devoted to a discussion of power potentials and the foreign policies of individual empires, countries, and regions. Historical, geographical, social, psychological, and political facts are arranged to indicate the position of individual nations within the framework of world politics. Projections of future power increases and declines are attempted, but it is always clearly stated where our knowledge is inadequate to warrant definite conclusions. For example, in the chapter on Russia pertinent data are enumerated; the strong points, present and future, of the Soviet Union are stressed, and her possible deficiencies in the fields of technology, economic organization, human relationships, and seapower discussed. Sumner Welles' opinion is quoted that the old imperial and Pan-Slavic policy of Russia "will soon again play an important part." But from all the conflicting evidence, the following conclusion is drawn: "In spite of greatly improved relations and better opportunities for observation, Soviet Russia still remains a good deal of an enigma." Impressions derived from readings on Russia "should be regarded as tentative and necessarily provisional, subject to possible revision in the light of fuller and more accurate knowledge."

It is especially gratifying that the Sprouts refrain from interpreting power in a narrow and materialistic sense. For example, after several sections dealing with the decline of Britain's economic, financial, military, and naval strength, they reprint a famous memorandum by Sir Eyre Crowe, where the distinguished diplomat shows how Britain compensated for her material shortcomings by intellectual and political means. The memorandum is well worth quoting: The danger that "a small island kindom not possessed of the military strength of a people trained to arms" may be overcome by a superior combination of nations "can in practice only be averted—and history shows that it has been so averted—on condition that the national policy of the insular and naval

state is so directed as to harmonize with the general desires and ideals common to all mankind, and more particularly that it is closely identified with the primary and vital interests of a majority, or as many as possible, of the other nations. Now, the first interest of all countries is the preservation of national independence. It follows that England . . . has a direct and positive interest in the maintenance of the independence of nations and therefore must be the natural enemy of any country threatening the independence of others, and the natural protector of the weaker communities. . . . It has become almost an historical truism to identify England's secular policy with the maintenance of this balance (of power) by throwing her weight now in this scale, and now in that, but ever on the side opposed to the political dictatorship of the strongest single state or group at a given time."

In the last part of the book, problems of peace-making are discussed, including various ideas about the peace settlement and the treatment to be accorded to Germany and Japan. The concluding pages are devoted to the question of how American security can be achieved; the last section is written by Grayson Kirk, who pleads for the establishment of, and American participation in, a world-wide security organization.

In sum, this volume is of the highest quality and will admirably serve its purpose as a text for university classes; it also deserves a great success among a wider public. It will be helpful to any person interested in political and military affairs. The editors may be sure that, for their Herculean labor and outstanding accomplishment, they will be rewarded by the gratefulness of their readers. The publishers, too, must be congratulated for having made possible the publication of such an imposing work.

STEFAN T. POSSONY,*
Washington, D. C.

The Great Pacific Victory, by Gilbert Cant.
(New York: The John Day Company. 1946.
Pp. 422. \$3.75.)

Mr. Cant's book is the continuation of his two widely known previous studies of the early stages of the naval war both in the Atlantic and the Pacific, taking the story of the Pacific war up at

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GILBERT CANT

the end of the struggle for Guadalcanal and carrying it through to the final surrender in the Bay of Tokyo. Through this concentration upon a single theatre the story has gained greatly in compactness. Apart from the isolated incident of the reconquest of the Aleutians—which could well have been tied in closer with the shifts caused by it in the struggle for the Solomons—the unity of the strategic purpose running through the whole until the final complete coordination of Admiral Nimitz' and General MacArthur's offensives for the assault upon the Philippines and the Japanese homeland is well brought out. The inevitable consequence has been to force Mr. Cant to go far beyond his original naval sphere in order to present the Great Pacific Victory as the close correlation of land, sea, and air power which, despite all interdepartmental frictions, it was. That most difficult task he has solved with quite remarkable success, even though at times, as in the story of the struggle for Kwajalein and again for the Marianas, his zeal has carried him so far as to threaten to swamp the overall picture by the too detailed story of the incidents in the fight on land. On

the other hand, the role of the Army Air Forces in the Pacific struggle could well have received considerably more attention; the more so as despite a great deal of day to day publicity its overall contribution has not as yet been brought out anywhere.

In general, Mr. Cant's book reveals all the excellent qualities of his previous efforts: the intense, passionate interest which he brings to his subject; an inexhaustible capacity for investigating details, critical independence of official versions and accepted versions, matured by three years of close personal contact with men and operations. His four pen pictures of Nimitz, Spruance, Halsey, and Mitscher are invaluable. On the other hand, he still does not give enough attention to the need of bringing out sharply the fundamental strategic issues. His narrative moves from the struggle for the Solomons to the great offensive in the central Pacific almost without a break; certainly without giving the reader a clear idea of the tremendous shift in the balance of strength that made it possible or of the radical change in the strategic situation brought about by it. The same is true of the overall strategic picture in the summer of 1945, which has inevitably suffered from the fact that the book was closed immediately upon the cessation of hostilities.

HERBERT ROSINSKI,*

Washington, D. C.

Soviet Far Eastern Policy, 1931-1945, by Harriet L. Moore. (Princeton: Princeton University Press. 1945. Pp. 110. \$1.50.)

In these times of numerous but exceedingly superficial books on Russia, it is a pleasure to read Miss Moore's treatise on Soviet Far Eastern policy. This weighty little volume is fine background for judging Russia's role in the current momentous events of the Far East. Miss Moore has written a well-documented history 1931-1945, based on thorough analysis of official Soviet publications. The book admittedly presents the Soviet aspect of the story, since the author is a specialist on Russia and apparently could not obtain sufficient Chinese and Japanese material for a complete survey.

Aside from its intrinsic value, the work reveals how well Russia's foreign policy is mirrored in the

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Soviet press. Although this fact may now be obvious, it is almost glaring in the historical retrospect of Soviet Far Eastern relations.

The faults of the book are not great. At times Miss Moore's interpretation of her material appears overly cautious. Far too little attention is devoted to Russia's attitude toward the 90 million Chinese Communists. Translations of several documents in the appendix suffer from sacrifice of style to literal accuracy, and therefore make difficult reading.

For the information of the hostile camps of admirers and scorners of the U.S.S.R., this book should be classified as pro-Soviet, but a scholarly work with an objective approach. Despite its faults, it is considerably more informative than the average "My Short Visit to Russia" book.

E. L. RAYMOND,*
Washington, D. C.

Black Ships Off Japan: The Story of Commodore Perry's Expedition, by Arthur Walworth. (New York: Alfred A. Knopf. 1946. Pp. 278. \$3.00.)

On August 27, 1945, advance units of the hard-hitting Third Fleet, commanded by Admiral William F. Halsey, a latter-day Perry, dropped anchor in Sagami Gulf to prepare for Japan's unconditional surrender. Seven months later, almost to the day, appears the fullest, handsomest, and most entertaining account of the first American naval force successfully to enter Tokyo Bay. Viewed in the light of events of the past year, Mr. Walworth's easy-flowing narrative makes absorbing reading. Never before have Far Eastern place names been so meaningful or historical parallels so apt. In 1945 Chester W. Nimitz prepared for the final assault on the Japanese home islands by occupying Iwo Jima in the Volcano Group and Okinawa Gunto in the Ryukyus. In 1853 Matthew C. Perry established his base at Naha on Okinawa and created a coaling site on Chichi Jima in the Bonins. The airborne units that landed at Atsugi airfield were flown over the same waters that had been thrashed by the paddle wheels of Perry's black ships. And General MacArthur, receiving the Nipponese delegation on the *Missouri*, stood not too distant from the Treaty House where Perry negotiated the pact that opened Japan to the world.

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A re-examination of Perry's exploit is both timely and profitable. His was, in the words of the late Charles O. Paullin, "the most important diplomatic mission ever entrusted to an American naval officer." No student of our foreign relations can neglect this example of the interrelation of diplomacy and naval policy. Perry's expedition, moreover, was not only the opening act in the drama of Japanese-American relations; it exerted a continuing influence for years to come. Townsend Harris could not have succeeded without it; Commodore Robert Shufeldt of Korean fame was inspired by it. When Perry's undertaking is viewed against the backdrop of European rivalries in the Orient, when we note his dislike of England, his contempt for the Dutch, and his suspicion of Russia and France, we appreciate the difficulties confronting our early "cooperative policy." This volume contains, too, interesting evidence of missionary zeal, of plans for naval bases in China, Okinawa, and the Bonins, of dreams for trans-Pacific steamship lines, and of the role played by the Navy in promoting scientific research.

In seventeen well-written chapters the author tells a not unfamiliar story with an undeniable freshness, enthusiasm, and dramatic skill. He begins by describing our earliest contacts with Japan, the mobilization of the expedition, its progress to the Far East, the dress rehearsal at Okinawa in May 1853, and the initial landing on Chichi Jima. Then come the visits to Tokyo Bay in July 1853 and March 1854, told with picturesque detail and not neglecting what transpired behind the scenes and screens. With the Treaty of Kanagawa concluded on March 31, 1854, we are taken to glimpse the opened ports of Shimoda on Honshu and of Hakodate on Hokkaido. Then comes the compact of friendship with the Kingdom of Lew Chew, signed at Naha on July 11, 1854, and a final estimate of the man that even the Japanese later came to canonize. Twelve appendices with complete texts of Perry's instructions, of letters between President Fillmore and the Emperor, and of treaties and agreements negotiated add a documentary quality to the book. The illustrations, taken from contemporary American and Japanese sketches, are excellent. There is a useful bibliography, which fails, however, to list all manuscripts examined by the author, and an adequate index, which falls into the all-too-frequent practice of omitting first names. Footnotes are relegated to the end of the volume.

For all its merits, the book is not a profound contribution to historical scholarship. Probably it

was not intended to be. The tale has been previously told, in briefer scope to be sure, by Griffis, Paullin, and Barrows. Mr. Walworth is the first to utilize the manuscript narrative of Lieutenant E. C. Preble and the recently published diary of Edward McCauley. He has profited by the research of Dr. Allan B. Cole and by translations of Japanese sources. Yet in the end he alters only in minor details the account in Edward M. Barrow's *The Great Commodore* (1935); and since both men relied on many of the same works, there are curious parallels in language and illustrative examples. Mr. Walworth is guilty of very few slips. It is not true that Perry died at Tarrytown (p. 233), and it is an exaggeration to say that Japan ever possessed "a minor Pearl Harbor" at Chichi Jima (p. 64). It is questionable whether the Democrats of 1853 were less expansionist-minded than the Whigs (p. 17). One could wish in places for fuller documentation, especially where Perry proposed to seize and fortify the Ryukyus and the Bonins (p. 120). But these are minor faults in a book that is worth reading, worth owning, and worth thinking about.

RICHARD W. LEOPOLD,*
Cambridge, Mass.

Battle Report: The Atlantic War, by Commander Walter Karig, USNR., with Lieutenant Earl Burton, USNR., and Lieutenant Stephen L. Freeland, USNR. (New York: Rinehart and Company. 1946. Pp. 558. \$3.50.)

Commander Karig and his co-authors deny any intention of writing definitive naval history. They call the second volume of their series "a narrative tour of the battle areas of the Atlantic, the Caribbean, the Arctic and the Mediterranean." This accurately describes a book that is valuable for the layman as an introduction to the use and importance of sea power in the late war. Its readability and human interest will appeal to many who would otherwise not trouble themselves to wade through the comparatively forbidding pages of official histories.

The war at sea in the Atlantic concentrated largely on antisubmarine operations and cooperation with the Army in its numerous landings from Africa to Normandy. The initial stages of the



WALTER KARIG

naval war in this area were as disastrous as the early catastrophes in the Pacific. Instead of a successful air attack as at Pearl Harbor, control of the Atlantic was almost lost to the vastly improved submarines and methods of underwater attack of the German navy. Our vulnerable lines of communication with Great Britain, and even along our own coasts, were seriously menaced. We are not told much about the technical devices that ultimately provided an effective answer to the novel forms of submarine attack. The authors point out that the close cooperation between the United States and British navies was instrumental in this achievement. However, we do get some insight into the dispositions and methods that eventually nullified the Nazi threat.

The operations of the Navy and Coast Guard before the outbreak of war carried the Navy to the waters of the Arctic. It is well to be reminded of this period of armed neutrality and to learn the methods adopted for enforcing our policy at the

*Professor Leopold has just returned to Harvard University to continue his courses in American diplomatic history after having served as Lieutenant, USNR, in the Office of Naval Records and Library, Navy Department.

time. The informal and eminently readable description of the amphibious landings on various coasts illuminates many points that have been obscure up to the present. Finally, the part played by the Navy in the crossing of the Rhine makes a most appropriate conclusion to the story of Army and Navy cooperation in the defeat of Germany.

Appendices include the training program of the Navy, an alphabetical list of United States naval vessels announced lost in the Atlantic-Mediterranean waters from December 7, 1941, to May 31, 1945, with the cause of their destruction. A list of awards and citations to personnel in this area concludes the volume, the reader of which is further aided by a much needed key to abbreviations used in the United States Navy. The many excellent photographs contribute much to the interest and value of the book.

The reader can hardly fail to note the prolonged period necessary for the transition from defeat to victory. The contrast between our naval strength at the beginning and the end of the war is a lesson that Commander Karig enforces with telling phrase and striking anecdote. In World War II we had the time to build up our fighting forces at sea. Perhaps this book will lead American citizens to closer awareness of the problems of national defense.

DONALD ARMSTRONG,*
Washington, D. C.

War Years with Jeb Stuart, by Lt. Col. W. W. Blackford. Introduction by Douglas Southall Freeman. (New York: Charles Scribner's Sons. 1945. Pp. 322. \$3.00.)

"War, terrible as it is, has its attractive side undoubtedly," wrote Lt. Col. (then Captain) Blackford shortly after Antietam. And this statement affords a key to Blackford's memoirs of his service with "Jeb" Stuart. Throughout the narrative runs a note of glowing satisfaction, even of elation. Blackford enjoyed the war; no doubt of that! He was rollicking in the recollection of its thrills twenty years later when he sat down to write this record.

He had reason to enjoy the experience. He was well-born and prosperous enough to afford a colored body servant who groomed his horses, cooked his food, and performed the other menial duties of

camp in the cavalry, a branch which carried as much glamor in Civil War days as did the "Bright Blue Yonder" boys in the 1940's. He was mounted on "Comet," one of the best horses in the Confederate service, and he was intimately associated with the most dashing of Confederate generals, the inimitable "Jeb" Stuart, whose love of fighting assured a full measure of combat and whose camp, thanks to the talent which his personality and fame attracted, sparkled with merriement and good fellowship during periods of quiet.

Blackford joined Stuart's command in the summer of 1861 and stayed with him until January 1864. During that time Blackford participated in every major engagement in which Stuart took part except Chancellorsville. He left Stuart only when offered a position of greater responsibility with the engineers, which carried with it an increase in rank. The most valuable portion of his memoirs is the part covering his work as an engineer in operations about Richmond. His account of the final days of the Army of Northern Virginia is superb.

Blackford was too devoted to Stuart to view him objectively. His judgments in general were often warped by an irrepressible enthusiasm for people and things that he liked. He was an inveterate sentimentalist.

But he fell occasionally into animadversions. A favorite target was the United States Military Academy. At one point he stated that "the average West Point officer who had reached the age of forty in the discharge of the duties of an army officer in time of peace, is worthless in war"; again he blurted: "Our cause died of West Point as much as any one thing." He made more than one thrust at Von Borcke, whom he regarded as vain and pompous. Of the intrepid Prussian's memoirs Blackford said: "In his book he makes out a great deal more than belonged to him. In repeated cases . . . he coolly speaks of having done things which I did myself."

Blackford thought the Confederate Congress singularly inept, and Davis he held in great contempt. Davis, in his opinion, was one of those stuck-up and privileged West Pointers, a man who surrounded himself with weaklings whose sole qualification was their fawning compliance with his wishes; he was a dictator; when the situation called for bold and aggressive action "there would come from him, proclamations appointing days of fasting and prayer"—these are some of the barbs that he flings at the Confederate President.

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Blackford's account is by no means devoid of inaccuracies. He places the fall of Atlanta in the spring of 1864, and he erroneously charges Grant with throwing his Negro troops against the Confederate lines at the Crater before committing the whites.

But despite the coloring of prejudice and occasional inaccuracies of detail, *War Years with Jeb Stuart* is a valuable contribution to Confederate military history. And for an evening's reading it is nothing short of fascinating.

BELL IRVIN WILEY,*
Washington, D. C.

Sub-Rosa: The OSS and American Espionage, by Stuart Alsop and Thomas Braden. (New York: Reynal and Hitchcock. 1946. Pp. 237. \$2.50.)

Cloak and Dagger: The Secret Story of the Office of Strategic Services, by Corey Ford and Alastair MacBain. (New York: Random House. 1946. Pp. 216. \$2.50.)

The authors of both books have deliberately chosen to highlight the dramatic field work of the Office of Strategic Services, not to give a sober analysis and evaluation of its activities during the war. As a result only a case study of undercover activities is furnished, which should appeal more to the confirmed reader of detective and adventure stories, than the analytical student of military affairs. The major accomplishments of the agency, such as its part in the North African landings, the resistance movement of France, the Burmese campaign, and the Thailand underground, are emphasized in both books and supplemented by many minor episodes, equally dramatic, but of less importance in the general conduct of the war. *Sub-Rosa* is the more soberly written and critical account. Within its pages the reader gets glimpses of the basic problems of all intelligence work which await analysis: the individualism of agents which defies organization; the internal rifts which can only be healed by outstanding leadership; the troubled relations with the armed forces and our allies which handicap operations in the field and in Washington. Students interested in the organization of intelligence in the armed forces will find

in these books some of the material for a future study of these problems.

RUDOLPH A. WINNACKER,*
Washington, D. C.

A Ribbon and a Star. Text by John Monks, Jr.; drawings by John Falter. (New York: Henry Holt and Company. 1945. Pp. 242. \$2.75.)

Captain Monks, who served with the 3rd Marines, here sets down a history of that regiment during the Bougainville operation and also describes in some detail the formation and training of the unit. By severely limiting his subject, that is, by confining himself to what he himself knows or has learned at first hand, he has been able to give a complete picture, to sketch in detail individual action, and to introduce characters by name. Primarily, the book will interest the members of his own regiment, but it should have a much wider reading public among those civilians who wish to learn something of what combat was like. This is an honest attempt to portray just that.

This book, the first probably of many similar, illustrates the difficulties of anyone trying to write an historical account of modern warfare. The military historian has theoretically one of the most interesting subjects in the field of literature. He is dealing with men who are fighting for their lives, who are living during an engagement or operation at an emotional pitch far above that of any comparable norm. If he himself has been in the combat, he has the opportunity to work from the most authentic sources; he can gain his story from personal observation and from the mouths of the men themselves. To him all but a few documents will be secondary sources. Yet even when the historian tries to set down the actions of a unit of less than 5,000 men, he finds that he is erring in one of two directions: (1) for the sake of clearness he is describing the operation as a kind of mathematical problem in which forces are moved on a checkerboard; (2) for the sake of human interest, he sacrifices clearness, and his narrative becomes a maze of independent actions.

Captain Monks has shown ingenuity and skill in the organization of his book: he starts in "the middle of things"—with the landing at Bougainville; he cuts back in the middle of the narrative

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to explain the origins of the regiment and its training; he emphasizes certain of his characters by careful thumb nail biographies; that is, he has avoided the monotony that can come to any historical narrative when it pursues a severely chronological course. The author has a nice ear for conversation, an intimate and wide acquaintance with small incidents, and a zeal for accuracy that must have driven him through many interviews.

Knowing many of the men he mentions, with fairly full knowledge of the terrain and of the operation as a whole, I find that I can follow his narrative with interest. I wonder, however, just what the average reader is going to make of the book; many of these names, that occur only once in the course of the book, will remain only names to him; without maps or sketches, with little knowledge of the operation as a whole he may be confused and bewildered; though he can appreciate each scene by itself, he will not be able to fit them together. The careful and brilliant pencil sketches of John Falter are of immense aid in giving immediate reality to the text, but they cannot supply the continuity that numerous sketches or careful descriptions of the terrain in the beach-head area could give.

This final criticism, however, does not detract from the very positive virtue of the book: it gives clearly, paradoxically enough, the sense of confusion of a battle, the boredom, the ache of weariness, the furious little skirmishes in which men die, the inverted values of an existence wherein death and mutilation become the norm.

PHILLIPS D. CARLETON,*
Washington, D. C.

Political Reconstruction, by Karl Loewenstein.
(New York: The Macmillan Company. 1946.
Pp. 498. \$4.00.)

Loewenstein's volume assigns to itself the examination of the real problems of the day: what types of government offer the best guarantee of peace; what degree of responsibility have the United Nations in seeing that the so-called sovereign states of the world establish and maintain such types of government?

Loewenstein sustains his thesis by providing us with a bird's-eye view of the various historical forms of government, going as far, in fact, as to inquire about the "justification of monarchy."

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Thus the core of the book is provided by a kind of introductory survey of the forms of governments and their operation; especially valuable chapters are those showing the relation of political dynamics to constitutionalism. The conclusion is that every nation has the right to choose the form of government it pleases, a right enshrined in the Atlantic Charter; but that right is the surest way to World War III, since the concept of national sovereignty is, in the end, one that allows the rise of nondemocratic states.

It is too bad that Loewenstein marks his book with his extravagant claims in his "Preface." To read that his is "a revolutionary book" which "is a frontal attack against one of the most firmly established maxims of the law of nations," and that "whoever buys the book will make a good bargain" makes the reviewer wish that the author would leave such claims to the publisher's blurb. For, after all, Loewenstein is not shadow-boxing and he is delivering a full punch—although the thesis he propounds has been one of the favorite topics of numberless internationalists. This punch is delivered with the armament provided by wide research which presents a clear and straightforward picture of its subject.

JOSEPH S. ROUCEK,*
Hempstead, Long Island.

Economic Demography of Eastern and Southern Europe, by Wilbert E. Moore.
(Geneva: League of Nations. 1945. Distributed in the United States by the Columbia University Press. Pp. 299. \$3.00.)

Two years ago, Professor Frank W. Notestein and his associates published one of the most important books on population of the war period, *The Future Population of Europe and the Soviet Union*. It was published by the League of Nations in cooperation with the Princeton office of population research, School of Public and International Affairs, Princeton University. In this book, a thorough analysis of the future trends in Europe's population was made. Professor Notestein predicted that between 1950 and 1970 there would be a great decline in the population of Western Europe, while Eastern European peoples would still show an adequate birth rate and dynamics. It is difficult to state definitely how the ensuing problems will develop, but if Professor

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Notestein's thesis is correct, then the fact that the Eastern European population belongs to the Soviet sphere of influence may be of particular significance.

Even before the war, large-scale immigration from Eastern to Western Europe offered a partial solution to France's demographic crisis.

Now, in his book, Dr. Moore discusses the problem of the future of those peoples of Eastern and Southern Europe who will still grow steadily in number, while those of Western Europe will slowly decrease. This is a problem of an agricultural population, since the areas of increasing population constitute the peasant region of Europe. Dr. Moore predicts that the future of that population may be a difficult economic struggle, in view of the fact that the surplus agrarian population in this region is persistent. There have been many studies on surplus population of various countries in this area (Bicanic on Yugoslavia, Ponia-towski on Poland, Egoroff on Bulgaria), but this is, to my knowledge, the first major study of this problem for the entire area, and it is most authoritative and important. It is generally accepted that the only solution to this phenomenon is industrialization, and Dr. Moore agrees with this thesis, rightly showing that emigration is only of secondary importance. But at this point the author brings in entirely new vistas on the difficulties in the regular industrial development of this area; he shows that new methods and new forms must be applied. Private enterprise and private finance will not solve the problem, as private savings in this area are mostly being reinvested in agriculture. Insufficient enterprising spirit has been shown in industry.

The social implications of such an economic reorientation are particularly interesting, and here Dr. Moore demonstrates that they will affect many aspects of the community—transform entire modes of living into a more urban path, and may have their influence on the weakening of family ties.

This book is an excellent reference work for any student of Eastern European affairs.

FELIX GROSS,*
New York, N. Y.

Years of Victory: 1801-1812, by Arthur Bryant. (New York: Harper and Brothers. 1945. Pp. 468. \$4.00.)

The author, Arthur Bryant, a distinguished English historian, served during World War I in

the R.A.F., after which he completed his education in Queen's College, Oxford. He has written a number of books that have been well received. In *The Years of Endurance: 1793-1802* he studied the efforts of England against the rising tide of the French Revolution and the first appearance of Napoleon. Now Mr. Bryant continues his studies to the fall of Napoleon as influenced by the English efforts on the sea and in Spain. In a way the author seeks to draw a parallel between England's efforts against Napoleon and against Hitler.

Mr. Bryant opens his narrative with the Peace of Amiens in 1802, an effort towards appeasement of conquering France; England abandoning her acquisitions beyond the seas while France retained her European conquests. Napoleon had not only consolidated his acquisitions but had by his genius restored to the French people internal law and order, a firm financial system and a desire for further conquest. England during the last sixty-three years had been engaged in war for thirty-three years; many of her people desired peace. France had again become civilized under the Corsican who no longer maintained order with the sharpened guillotine but had substituted for it the dull edge of the police sword.

There began at this time a diplomatic and political duel between France and England that is well described. The war party in England instigated an unprecedented campaign of abuse of Napoleon resulting in France's beginning preparations for an invasion of England. England was not prepared to defend itself for want of men, arms, and ammunition. What amounted to a panic sprang up among the people and even extended to the government. Masses of volunteers and militia that were hastily raised seriously blocked the recruiting of the regular forces as the lack of discipline in the temporary forces was preferred to the strictness of the regulars. Volunteers were armed with pikes so that, had they confronted the muskets of French soldiers, they would have been a sacrifice. Lines of earthworks were constructed covering a series of defensive positions arranged in depth. Fortunately for England she had her fleet; but this fleet did not yet dominate, as France was to acquire additional ships from Holland and Spain. Only after Trafalgar did Nelson secure this domination. England realized the absolute necessity of securing a safe bridgehead on the continent. Meanwhile she took from France and her allies their colonial possessions, particularly the sugar islands of the West Indies. In 1804 certain English diplomatic agents assisted in a

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plot to assassinate Napoleon and it is refreshing that the author frankly accepts this long established fact though many English historians have consistently denied it.

The author gives a valuable account of the strategy of the British and French fleets up to Trafalgar when the great Nelson opened the seas to British domination. He also describes fully the tactics of the two fleets in that decisive combat.

In 1808 England finally landed an army in Portugal and began a tragic campaign against the communications of the French in Spain but Napoleon in person led an overpowering mass against the English troops and what remained of them reembarked for England at Corunna, leaving the body of their general sleeping in the ramparts of that fortress. The distinguished career of Sir John Moore is reviewed in detail, including his work towards creating light troops who performed the functions of the German *jäger*. This account of Moore's campaign is very complete. The campaign is viewed from the level of Cabinet down to that of the corporal of a picket. This chapter is perhaps the outstanding one, constituting a brilliant piece of descriptive writing. The arrival of Wellington in Portugal with a second British army is then related. He is followed throughout his campaign that resulted finally in driving the French from Spain.

The author makes no attempt to go into tactical details as his is not a war book but an accurate account of events civil and military, showing the part taken by the administration, the politician, the people, and the army. He gives the battle reaction of the soldier by a wealth of quotations from diaries.

The author's descriptive powers are highly developed and his style is colorful and elevated. He approaches and at times rivals that great master of military narrative, Napier, in his *Peninsular War*, the classic of its kind in English. Mr. Bryant fully acknowledges the ability and courage of the French and he gives ample credit to the Spanish guerrillas who harried the French columns day and night, exhibiting at times the ferocity of beasts.

Of Wellington he says: "The distinguishing feature of this great soldier's mind was that it dwelt as much on the future as on the present. He was a strategist not merely in space but in time."

Wellington was not only able to formulate a far-reaching plan but he was able to carry one out in spite of many setbacks. To do this a general in

the field must have and maintain the confidence and active support of the government. Fortunately for Wellington he was of the aristocratic governing class and had close relatives in the government. They supported him when times were hard. It is not believed that an American general can count upon such loyal support regardless of his excellent plans for the future. Delays, heavy losses, and certainly loss of battles are generally sure to bring about the relief of an American general.

This excellent work is well worth reading as history and literature.

JOHN W. WRIGHT,*
Washington, D. C.

Soldier of Democracy: A Biography of Dwight Eisenhower, by Kenneth S. Davis.
(Garden City: Doubleday and Company.
1945. Pp. 566. \$3.50.)

Davis' biography of Eisenhower makes entertaining reading. Like the efforts of previous biographers of the Allied European commander, it is essentially for popular consumption. Within these limitations, however, *Soldier of Democracy* is a workmanlike job, well-balanced and well-written, and considerably better than any other biography of Eisenhower published to date.

The first third of *Soldier of Democracy* is given over to a study of Eisenhower's origins, family, boyhood, and young manhood. Davis is at his best in these chapters. His account of the life of an average Middle Western family is realistic and his narration is skillful. It is true that most of the facts and many of the anecdotes to be found in these first two hundred pages are already part of general public knowledge due to the tremendous press publicity given Eisenhower in the past three years, but there is merit in bringing these items together under one cover as Davis has in *Soldier of Democracy*.

But Davis is not as successful in capturing the spirit, nor in relating the activities, of Eisenhower as a soldier. Davis' attempt to indicate the persons and forces influencing Eisenhower's career falls considerably short of its mark. The chapter devoted to the relationship between General Fox Connor and Eisenhower is far from convincing, as is almost every other attempt in the book to find

*Colonel Wright, USA, Retired, is one of the great names in American military history. His contributions have been summarized very well in the *Alumni Gazette* of the College of William and Mary, XIII (May 1946), pp. 9-11, 20-21.

the origins of Eisenhower's ideas and his opinions and to trace the growth and development of the man as a soldier.

Nor is Davis successful in his recital of the details of planning and of operations during the period from June 1942, when Eisenhower left for England to begin preparations for the war in Africa and Europe, through the end of the campaign on the western front. But this is an account that Davis could not adequately write in 1945 without reference to basic sources—nor will anyone be in a position to write it adequately in the future without such research. For that story we shall have to look to the military historians, when pertinent materials are made available for investigation.

ARTHUR F. OWEN,*
Washington, D. C.

Aspects of Army Depot Administration, by Schuyler Dean Hoslett. (New York: American Historical Company. 1945. Pp. 87. \$2.00.)

The author of this book has had the opportunity to study and observe the operations of one of the large Army supply organizations during the course of the war. He has found that the problems of management were similar in many respects to those encountered in business. The author has been careful, however, to point out to the reader the peculiarities of military administration and the unusual problems confronting management during the war. The first half of the volume is devoted to the general administrative problems of the Kansas City Quartermaster Depot. This discussion includes a careful description of the system of administrative control, some of the problems of organization, and of the installation of a work simplification program. The second half of this study deals with personnel administration. The use of modern placement aids, the orientation of executive personnel, and the training and counseling of employees are frankly described and analyzed.

Nearly all of the material included in this book appeared originally in periodical form. This fact does not limit or detract from the volume, but actually enhances its usefulness for executives and supervisors. Mr. Hoslett has described various programs of action that were designed to improve the management function under the unusual conditions that prevailed during the war. The man-

agerial problems are perennial; the conditions that existed at the Kansas City Depot probably focused sharper attention upon the need for their solution than obtains in less troubled times. The chief virtue of this little book is the objectivity with which the author has analyzed and evaluated many of the important administrative activities and programs. Unlike many writers, he has pointed out the shortcomings as well as the success of the attempts to improve managerial efficiency. In most instances the author made cogent suggestions that should be of interest to management. Mr. Hoslett has been indeed fortunate in having been able to conduct his researches while associated with a management that, if not perfect, was exceedingly alert.

ELLIOTT CASSIDY,*
Washington, D. C.

Eastern Europe Between the Wars, by Hugh Seton-Watson. (New York: The Macmillan Company; Cambridge, Eng.: Cambridge University Press. 1945. Pp. 442. \$6.50.)

Between Germany and Russia live some hundred million people, with unpronounceable names and who live in plains and forests, on mountains and by rivers which, as far as the Anglo-Saxon world is concerned, might be in another world. When Chamberlain spoke of the Czechoslovaks as "the people of whom we know nothing," he was telling the truth and he was speaking for the Anglo-Saxon speaking world.

Although both World Wars started in Central-Eastern Europe, both were the result of a combination of political, social, and economic conflicts which governed the relations of the imperialist Great Powers. At any rate, Central-Eastern Europe is vitally important to Great Powers,—the United States, Russia, and Great Britain. Any serious study of this region is *ipso facto* a welcome contribution. Of the growing stream of publications on the region, most of which are propaganda pure and simple, Seton-Watson's work is one of the best, in spite of its numerous minor weaknesses. It concentrates particularly on the social and political backgrounds of the states of Czechoslovakia, Poland, Hungary, Romania, Yugoslavia, and Bulgaria; references are made in the chapters dealing with foreign policy to Greece, Turkey, Albania, and Lithuania.

Obviously, then, the treatment is not always systematic. Then, Seton-Watson claims that "my

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sources have mainly been people. Conversations with men and women of each nation, of various political views and social origin, give one in some ways a better picture than study of documents. . . . A second source has been mere travel" (p. ix). Such claims are silly. The historical chapters of the book could not be written simply as a result of the author's travels and conversations. They had to be written by synthesizing the best available studies in the field, and in this respect Seton-Watson makes a mighty poor showing by omitting references to standard and well-known works and by making frequent references to works which cannot be always considered as the best material available on certain subjects. Specifically, Seton-Watson depends too much on books of C. A. Macartney, who is too inclined to lean to the Magyar point of view; consequently it is inaccurate to state that the promised Ruthenian autonomy was never granted by Czechoslovakia or that in Ruthenia few of the educated men were willing to devote their lives to educating their less fortunate compatriots, for the Teachers' College at Uzhorod, headed by the Uniate Father Volosin, had a long waiting list of candidates for admission.

All in all, the author gives a definite impression that he has tried to write the last word on the subject and that he and his father (who helped his son to prepare the book) are the only authorities, next to a few British authors, on the subject. That might have been also the reason why no bibliography is included.

JOSEPH S. ROUCEK,*
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The Idea of Nationalism: A Study in Its Origins and Background, by Hans Kohn.
(New York: The Macmillan Company. 1944.
Pp. 735. \$7.50.)

Students of military history in the narrower sense have recently been proffered various broadly-conceived surveys which, by giving useful background information, help to illuminate their field of interest. In this respect Professor Kohn's work may be classed with Quincy Wright's *Study of War*. This will be even more true upon completion of a subsequent volume, announced on page vii of the present one, where Professor Kohn's theses will be elaborated in "The Age of Nationalism" by way of a "Study in the Growth and Fulfillment of an Idea" on a world-wide scale between 1789 and 1919.

Any inquiry into the idea of nationalism, in its religious, ethical, and philosophical roots and institutional implications, challenges the analyst as to methods and modes of approach. The theme in itself and the universally comparative view taken by the author will cause critical reactions in students whose outlook is similar but differently oriented. Suggestive examples of such reactions may be found in reviews by Charles Beard in the August 1944 *American Political Science Review*; by Halvdan Koht in the October 1944 *American Historical Review*; and by Pauline Anderson in the *Journal of Central European Affairs*, same date. Much as Professor Kohn offers in what he calls (page x) "perhaps the first detailed history of nationalism in any language," Waldemar Mitscherlich's *Nationalismus Westeuropas* (1920) still commands attention. Although it covers a more circumscribed area, Mitscherlich's volume, in the opinion of the reviewer, arrives at a more succinct analysis of the subject.

Professor Kohn's introduction, dealing with the nature of nationalism, presents its ideological and institutional ingredients as he sees them. Readers who wish to obtain full benefit from the body of the book plus the laborious apparatus of notes (pp. 577-722) will do well to bear this analysis constantly in mind. It must be regretted that, from the point of view of checking for specific information, neither the table of contents nor the index adequately reflects the immense amount of data compressed within this book. A patient student can profitably plow through the notes for a more detailed understanding of the multitude of topics from Hebrew and Greek beginnings to evolving American views.

Military historians with a sociological inclination will be startled here and there, both in the text and in the appended documentary and literary discussion, by observations on the role of wars and the significance (or insignificance) of military phenomena in relation to the idea of nationalism. While such observations appear at times to be of an incidental sort, they call nonetheless for greater elaboration than Professor Kohn has given them, if they are to be convincing. The same is true of some of his allusions to economic factors, made in the garb of *clichés* which do not necessarily fit—such as "mercantilism"; or "the period of *laissez faire*" with its presumed aim of "promoting the individual welfare"; or the uncritical use of the theory of the propitiousness of "Calvinism" for the development of "capitalism"; or the rather broad application of the term "physi-

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ocracy." Some of the "intellectual climates" suggested by these assumptions do not appear to be too trustworthy.

Discussing (page 113) the lack of internal cohesion in France during the early 15th century and the development of more centralization toward the middle of that period, Professor Kohn refers to two ordinances, one aiming at a more centralized royal tax system and the other making "all war in this Kingdom" appertain to the Crown and its officers. If this is interpreted as "a reform . . . helped by the contemporary invention of gunpowder and artillery," much more needs to be said in evidence of such a claim.

If it is true (page 17) that "as a rule, wars before the French Revolution did not arouse a deep national sentiment . . . [that] Germans fought against Germans and Italians against Italians . . . [that] soldiers and civilians entered the service of 'foreign' rulers [serving] with loyalty . . . which proved the absence of any national sentiment," then the "national" reaction of various contemporaries against mercenary activities,—expressed, for example, by Zwingli and by Machiavelli—needs to be given recognition and explanation. The latter two, as well as similar cases on record, illustrate what the author felt in note 6 on page 580 in another connection, namely, that: "Here as elsewhere in history and social life we find a constant mutual interaction of cause and effect." More might be unearthed on both the positive and negative effects of the *diferentes naciones* marching in the armies of mixed mercenary systems and their place in the background and origin of the idea of nationalism. Likewise, reactions caused by religious objectors to war, and appeals made to such objectors, may throw light on the subject. Anabaptists and Quakers as well as non-resistance movements which split off from the Eastern Church left pertinent historical records traced on widely varying backgrounds of the idea of nationalism.

ERNST CORRELL,*
Washington, D. C.

Merchant Ships, 1444, by E. C. Talbot-Booth assisted by E. B. R. Sargent. (New York: The Macmillan Company. 1945. Pp. 700. \$19.00.)

The general features of this valuable work have already been described in these columns in con-

nection with the previous edition. This latest annual edition supplies "the most exact details available" about ships recently built and sunk, and thus furnishes valuable detail concerning the war at sea. One particularly poignant section contains pictures of some of the "well-known British ships lost" including the heroic *Jervis Bay* and *Rawalpendi*, as well as three of the beautiful "Empress" class, and the old Cunarder lost in the Dunkerque evacuation. This edition "is illustrated with more than 900 photographs and 2,400 line drawings of ships, 840 line drawings of house flags, and 1,520 line drawings of funnels for recognition," in addition to a vast amount of specific data concerning ships and lines.

ROBERT G. ALBION,*
Princeton, N. J.

Night Work: The Story of Task Force 39, by Fletcher Pratt. (New York: Henry Holt and Company. 1946. Pp. 267. \$3.00.)

Mr. Pratt undertakes to relate in this little book the adventures of Rear Admiral A. S. Merrill's Cruiser Division 12, later TF-39, which he explains was nicknamed the Hollywood Squadron on account of the presence of Lieutenant Robert Montgomery, USNR., in the *Columbia*. The period covered is from January through November 1943; the locale, the southern and central Solomons, and the narrative embraces such noteworthy actions as the two battles of Kula Gulf, the battle of Vella Lavella, battle of Empress Augusta Bay, and other clashes, little understood or appreciated at the time by the general public. Each chapter is concluded by quoting, for purposes of comparison, the official communiqués, Japanese and American—a happy inspiration.

Mr. Pratt writes well and fluently and is at his best when describing a hot naval action in which, unlike others, he is careful to relate the part played by aviation on both sides. Although the reader may follow such a passage with breathless enthusiasm, when the action breaks off and the ships go home he is apt to wonder what it had all been about. Attempts to fit the author's account into the larger picture of Pacific strategy are unsuccessful. For Mr. Pratt presupposes a greater familiarity with both what the United States and Japanese navies were up to than the average reader possesses. And unless he already knows all about it, our reader will remain ignorant of the purpose

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*Professor Albion is the author of several works on maritime history, his latest being *Sea Lanes in Wartime* (New York, 1942).

of running the "Tokyo Express" despite its frequent mention in the text.

Equally unsuccessful to this reviewer is the treatment of flag and other officers. Considerable research has been done in the *Lucky Bag* and we have all the commanders' Academy nicknames, liquor capacity, gastronomic preferences, and other details designed to explain what makes them tick. It is no secret that these men are human beings like everyone else and these descriptions succeed more in being familiar than relevant.

There are seventeen full page charts, but no list of them. The charts are clear, neat, and well selected and rendered somewhat useless by the absence of any scale or indication of latitude and longitude. There are also seventeen plates of photographs, some of them pertinent. A confused deck view of the *St. Louis* so confused the printer that he put it in the book sideways!

Mr. Pratt is an accomplished writer and journalist. *Night Work* is, however, an interim publication, which is not up to his usual standard.

ALEXANDER C. BROWN,*
Washington, D. C.

Automatic Weapons of the World, by Captain M. M. Johnson, Jr., and Charles T. Haven. (New York: Morrow and Company. 1945. Pp. 643. \$7.50.)

Expanded by some 300 pages, Johnson and Haven's *Automatic Arms* (1941) reaches its third edition under the title which heads this review. Still divided into five major parts of from two to five chapters each, the work has undergone some rearrangement. Thus the positions of Parts One and Two in the original are now reversed, with "History and Development" following, rather than preceding, "General Principles" [of operation]—the latter a more suitable title than the one originally employed (i.e., "How They Work"). Designations of the other parts, which remain unchanged, are: "How to Keep Them Firing" (Part 3), "How They May Be Employed in Combat" (Part 4), and "Miscellaneous Considerations" (Part 5). There then follow four appendices, a bibliography, and a subject index.

To quote my review of the first edition (as published in the March-April 1942 issue of *Army Ordnance*): "Messrs. Johnson and Haven appear to have conducted as complete a study of the whys and wherefores of machine-gun operation and application as has ever been made in the history of

that device." In addition, they have provided a most comprehensive resumé of the history of "Early and Experimental Pistols," "Military Pistols," and "Pocket Pistols" (Chapters 9-11, inclusive), subjects to which a full 100 pages of the present work are devoted as against the single 23-page chapter entitled "Automatic Pistols" in the original volume. The coverage of these topics is excellent, and the scores of photographs of early semi-automatic handguns which have been added to those formerly presented will delight the heart of him whose interests lie in this field. The same holds with respect to the present exposition of early self-actuated shoulder weapons, where a single chapter is now replaced by two, and the original ten pages of text expanded to about forty.

Again to quote my earlier review, I "question the wisdom of devoting practically one-third of the volume to long, and sometimes a bit tedious, discussions of tactical considerations indicating or contra-indicating the employment of this or that type of weapon in the infantry squad, its correct density of distribution if and when employed, its ammunition supply, accuracy, maneuverability, and general effectiveness." These topics still impress me as items more suitable for discussion in a volume on infantry tactics than in one presumably dedicated to an exposition of the military and mechanical characteristics of automatic and semi-automatic weapons. But Captain Johnson has devoted so much time and thought to these matters that it would be superhuman for him to refrain from giving them a place, and a prominent one, in a work such as this. And since his studies in this field have been so productive, it is better that they see the light of day in the present offering than that they blush unseen in his reference files.

For arms lovers and other interested persons not familiar with this work in its earlier and less voluminous form, be it explained that it offers an exhaustive treatment of practically all the standard modern, and many of the early, automatic pistols, submachine guns, semi-automatic rifles and shotguns, light and heavy machine guns. Included also are automatic cannon up to 40mm in bore, also certain of their progenitors such as the manually-operated Gatling and Hotchkiss in cannon calibers (i.e., over .60 inches), and the Maxim "Pom Pom" of Boer War fame.

Especially interesting to me was the excellent collection of cuts of early automatic pistols, rifles, and shotguns. Never before between one set of covers have I seen such an inclusive gathering of these. Helpful also are the appendices. Of these

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Number I offers in table form the characteristics of most of the best-known modern (military) automatic weapons. Number II outlines, again in table form, the ballistic characteristics of the most widely used military small arms ammunition, as well as of several types of sporting cartridges. Appendix III, reprinted from the Infantry School *Mailing List*, comprises five pages of data of interest to the military but hardly to the average civilian. Number IV presents outline drawings and descriptions of the military small arms ammunition of today, and includes an unexampled set of sectionalized drawings of machine guns and submachine guns.

The book concludes with an excellent bibliography and a subject index. Constituting as it does a reference work of outstanding importance, and written in the pleasing style for which its authors are noted, it deserves a place on the library of every devotee of the rifled tube.

CALVIN GODDARD,*
Washington, D. C.

5,000 Miles Toward Tokyo, by Green Peyton.
(Norman, Okla.: University of Oklahoma Press. 1945. Pp. 173. \$2.50.)

It is fortunate that publishers' jackets normally are detached rather early from the volumes they enclose; Mr. Peyton's book would gain by divorce from the ambitious claims staked out for it by the publisher, who informs us that this, among other things, is a "history of the amphibious campaigns in the Pacific and a fascinating analysis of the strategy employed by Admiral Nimitz and General MacArthur . . ." The book is not a history of these things. Rather it is a lively personalized tale of Air Group 60, whose home was the CVE *Suwannee*, written by a naval air combat intelligence officer whose purpose is to redress the unfavorable balance of sentiment and understanding prevailing against the CVE airmen. The kudus have gone to the first team on the "Big E" and her *Essex* class sisters, but here is a very brief and partial unit history of the unsung air workers of the fleet, put together in the style of *Time Magazine*.

So long as Mr. Peyton remains close to the activities of Air Group 60, he is fairly safe, but in moving out into the field of strategy he falls afoul of the limitations of his sources of information as a naval CI officer, with the result that a surprising

number of his assumptions, facts, and conclusions run rather wide of the mark. A few examples will suffice. The American offensive was not "really started" in the Gilberts (page ix). By November 1943, we had taken Guadalcanal, New Georgia, and were safely on Bougainville in the Solomons; in New Guinea we had taken Lae, Salamaua, and were on the way to Madang. Despite the author's affection for and loyalty to his weapon (no carriers "have better lines than the *Sangamon* class," page 3), it was possible to mount offensives without the CVE's. Loss of Tarawa meant very little to the Japanese, despite the deadly defense met by the Marines; the place had been written off before it was assaulted, but the Solomons, on the other hand, were to be held, with the result that those islands became a sinkhole for Japanese naval air power. And the Army actually was on Saipan, despite the fact that Mr. Peyton had the Marines carry it all off singlehanded (page 115). Certainly the Jap naval commanders at Rabaul would have been happy to know that Halsey's early Third Fleet in the South Pacific "existed on paper" (page 91); they might wonder what it was that shot down at least 316 of their best pilots in the twenty-six day period following the landings on Rendova, when the AAF, Navy, Marine, and RNZAF pilots under COMAIRSOLS accounted for more Jap air strength than all the carriers together at Tarawa, Kwajalein, and Eniwetok.

It is this sort of thing which mars the story of Air Group 60 in this book, and there is such a mar on nearly every third page. The members of the group will enjoy the book; others will too, but they might well extract the exploits of *Suwannee's* flyers and leave the rest. The Pacific campaign was not fought quite so flawlessly as Mr. Peyton would have us believe, there was a fair amount of important fighting going on beyond the ken of the CVE airmen, and the major decisions emanated from the Joint Chiefs of Staff, rather than from Pearl Harbor or the Southwest Pacific.

KRAMER J. ROHFLEISCH,*
Washington, D. C.

A Basic Manual of Military Small Arms, by W. H. B. Smith. (Harrisburg: Military Service Publishing Company. 1945. Pp. 351. \$5.00.)

The new edition of this work is nearly twice the size of the original paper-bound version, which used 213 pages to describe 82 items. There are a

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*Mr. Rohfleisch has been engaged in historical activities relating to air operations.

few errors of fact, or misprints, so difficult to keep out of a work of this scope. Some of the more obvious bear mention.

The Schwartzlose is described as the only heavy machine gun using a powerful military cartridge. This statement should be qualified by saying a gun with this type of action (delayed blow back).

On page 58, Mr. Smith speaks of the "British Lewis .30-06 light machine gun." The .30-06 version of this gun is American, either the Model 1917 ground type or the Model 1918 aircraft type. Both were made only in the United States. We did let the British have several thousand of them after Dunkirk.

Speaking of the Vickers gun, the impression is given that this, too, was a strictly British gun prior to 1917. The standard machine gun of the United States Army was at one time the Model 1915 Vickers. During World War I, we made an aircraft Vickers also, the Model 1918. The only United States Vickers guns available to the British under lend-lease were these .30-06 models.

I am sure that the name of General Chauchat was never spelled Chauchard, though sometimes that spelling has been used erroneously by American writers when speaking of his automatic rifle.

On page 137, the statement is made that all models of the Schmeisser pistol were made and sold at a fraction of the cost of American sub-machine guns. A fraction of \$20 (approximate cost of the U. S. M-3) isn't much, and I'm sure that the Schmeissers sold to Bolivia in 1929, for example, cost more than that, even though subsidized by the German Government. Of course, subsidies cannot be considered in cost comparisons. No doubt, the pre-war Thompson did cost more than any Schmeisser. Surely our M-3 did not.

Of United States caliber .30 machine guns, only the Model 1917 and 1917A are discussed. Of these, we had some 72,000 after World War I, and about 42,000 more were made at Rock Island Arsenal during World War II. It would seem that the caliber .30 aircraft machine gun, of which we made some 183,000, and the variations of the Model 1919 ground type, of which we made nearly half a million, should be described at some length.

Speaking of the British Enfield .380 pistol, the author says, "... this model will function only as a double-action weapon [it has no hammer spur]; the hammer cannot be cocked by the thumb." Here's where I stick my neck out. To my way of thinking, such a weapon should be described as a single-action, self-cocking revolver. Most shooters use the term otherwise, but origi-

nally, a single-action revolver was one which operated in only one way, either cocked by hand and fired by pulling the trigger, or self-cocked and fired by a continuous pull on the trigger. The former was the popular American type, the latter the European. A revolver in which the manner of cocking was optional was known as a double action (two ways). It can't be "double action" if it works only one way.

There is considerable discussion of cartridges in the manual, but few detailed illustrations. More of these would have helped to distinguish some of the cartridges which, though very nearly alike, are not interchangeable.

But these and a few similar items represent only minor faults. Where else can the arms enthusiast or military man find so much modern arms data jam-packed into one set of covers?

Mr. Smith speculates on why American manufacturers of arms did not have specimens of captured matériel delivered to them for study. This is, indeed, a good question. Even in our armed forces, information of enemy developments was effectively withheld from extensive circulation by being classified "Confidential" or "Secret." Just whom it was intended to deprive of this information is the \$64 question. Certainly it was not being kept from the enemy who made these items.

One conclusion is obvious, after looking through Mr. Smith's manual of small arms—everyone interested in modern arms should have a copy. Thanks are due the author for a tremendous job well done.

R. L. LEWIS,*
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American Soldiers in Siberia, by Colonel Sylvian G. Kindall, U. S. A. (New York: Richard R. Smith. Pp. 251. \$2.75.)

An energetic former platoon commander tells the story of our "Forgotten Army" in *American Soldiers in Siberia* in a refreshing, natural way. After the abdication of the Czar in 1917, Siberia became the scene of a very complex chain of events. The "White" or anti-Bolshevik Russians made their last stand there and Allied armed forces were sent to back them up. The American, English, French, Japanese, and a force of about 70,000 Czechoslovaks were assigned for that purpose and helped hold the Siberian line.

Maj. Gen. W. S. Graves commanded the Amer-

*Major Lewis has been Chief of the Historical Section, Office of the Chief of Ordnance.

ican force of 10,000 men with the 27th and 31st Infantry from the Philippines, with various attached troops, from the summer of 1918 to the spring of 1920.

The part played by Lieutenant Kindall is that of a typical American youth, generous and brave. His belief "that the Russians and ourselves, both of the same race in color, had codes of honor and fair play which were not far apart," coincided with my impressions. His descriptions of events and adventures, amusing and tragic as some were, made such enthralling reading that I completed the book in two sittings. As Russia is now the paramount nation in the old world, it will be well to understand her conglomerate people and the reading of this book should lead to a better understanding of their ways.

M. L. CRIMMINS,*
San Antonio, Texas.

Fighting Divisions, by Chief Warrant Officer E. J. Kahn, Jr., and Technical Sergeant Henry McLemore. (Washington, D. C.: The Infantry Journal. 1945. Pp. 218. \$2.50.)

A readable and useful reference volume giving brief histories of all divisions that comprised our ground combat forces in World War II. No attempt is made to present more than a sketch of the more noteworthy movements and exploits of the organizations. The book will be of particular interest to those who have served in the war and will be helpful to the general reader seeking to acquaint himself with the major accomplishments of the divisions in the various theaters of operations. Included are prints and color plates of divisional insignia, maps of the theaters of operations, and lists of units, commanders, campaigns, and battles.

ELIZABETH B. DREWRY,*
Washington, D. C.

British Merchantmen at War; the Official Story of the Merchant Navy: 1939-1944, by J. L. Hodson. (London: H. M. Stationery Office; and Chicago: Ziff Davis. 1945. Pp. 143. \$1.50.)

This admirable combination of atmosphere and information was prepared for the Ministry of War Transport by the Ministry of Information.

*Colonel Crimmins was a member of General Graves' staff on the Siberian expedition.

*Miss Drewry is Reference Supervisor, War Records Office, National Archives.

Those official auspices have not dulled its style; a comprehensive survey of the essentials, together with plenty of facts and figures, is rendered vivid and readable by plenty of colorful illustrative episodes. The eighteen brief chapters fall under three major headings: "The Men of the Merchant Navy"; "Shipping: The Plan and Achievement"; and "The Great Convoy Routes." One finds everything from the major strategy of tonnage allocation through the mechanics of loading and convoy conduct to episodes of survivors adrift in boats. Five good maps, a war cargo diagram, and dozens of excellent pictures add to the interest and value of the study. There will be, of course, room for more detailed analyses of the sort which Fayle provided with his *Merchant Shipping* for the last war, but even when those come, this will be a useful introduction and a good model for other official histories on both sides of the Atlantic. A companion work on British coastal shipping is planned.

ROBERT G. ALBION,*
Princeton, N. J.

The Old California Trail: Traces in Folklore and Furrow, by Julia Cooley Altrocchi. (Caldwell, Idaho: The Caxton Printers, Inc. 1945. Pp. 327. \$4.00.)

Julia Cooley Altrocchi presents a book with integrity, in spite of occasional over-writing. With emphasis on the growing folklore of the trail, the volume offers a synthesis of scholarly facts from older sources, firsthand "collecting" through interrogation of old timers, and funds of personal observations gained from a series of trips retracing the California Trail. It makes a good companion to Paden's *In the Wake of the Prairie Schooner*, published in 1943; and should appeal to the reader interested in early history of the West when a tiny United States Army was spread out thinly to provide the frontier with a semblance of order and protection.

THURMAN S. WILKINS,*
Washington, D. C.

*Dr. Albion is Assistant Director of Naval History for Administration, Office of Naval History, Navy Department.

*Mr. Wilkins, General Secretary of the American Military Institute, has long been interested in the transit of civilization into the Far West and has pursued studies in this field at the Huntington Library, San Marino, California.

Cavalryman Out of the West, by George F. Brimlow. (Caldwell, Idaho: The Caxton Printers. 1944. Pp. 442. \$5.00.)

The Western Cavalryman was Brigadier General William Carey Brown, whose forty-five years of army life were filled with action from the later Indian Wars through World War I and who was noted in later years for his intense interest in the history of the West—an interest reflected in publications such as his *History of the Sheepstealer Campaign in Idaho, 1878* (1926) and *Old Traverse des Sioux* (1929).

This book is not a definitive biography but a well written narrative of a little known period in American military history from the perspective of a representative army officer who made many contributions in various fields of endeavor.

Much information of value is found on these pages, but the lack of an index does impair its reference use. The elimination of footnotes is tantalizing for a reader who would like to know more about certain individuals. For example, reference is made in the text to the Apache "Kid" (pages 158-159), yet no information about the "Kid" could be found in the "Order of Indian Wars File" deposited with the Institute Library.

G. J. STANSFIELD,*
Washington, D. C.

Firearms of the Confederacy, by Claude E. Fuller and Richard D. Steuart. (Huntington, West Virginia: Standard Publications, Incorporated. 1944. Pp. 333. \$12.50.)

The chief merit of this volume lies in its extensive contribution of facts to the relatively meager sources of information thus far assembled on the subject of Confederate small arms and Confederate ordnance in general. Whatever its shortcomings, it is without a competitor in its field.

Such a compilation of data is no mean achievement, and merits considerable praise. Handling of it is another matter, however, and in this respect the book as a whole is replete with disappointments. The War Department collection of Confederate Records now in the National Archives alone contains at least one hundred fifty volumes of records relating to the Confederate Ordnance Department and various arsenals and armories of the Confederacy, apparently untouched by the

authors. An inventory of these records appears in an article by Arthur Cappon, "A Note on Confederate Ordnance Records," in the Summer 1940 issue of this magazine.

To this volume, then, goes the credit due all pioneers in new fields, with considerable thanks for much that is valuable, together with a sincere hope that the ground work laid here will lead to the final story on Confederate ordnance.

JAMES N. YOUNG,*
Akron, Ohio.

NOTES

One of the best popular naval books of the past months is Richard A. Shafter's *Destroyers in Action* (New York: Cornell Maritime Press. 1945. Pp. 242. \$2.50) in which the history of American destroyers—based in part on official records—is told in terms of the brave actions of individual ships and the men for whom they were named.

The fourth revised edition of *The Articles of War Annotated*, by Colonel Lee S. Tillotson (Harrisburg: Military Service Publishing Company. 1946. Pp. 386. \$2.50) has incorporated all the latest changes, continuing its value to those having need of such a reference volume.

A Psychiatric Primer for the Veteran's Family and Friends, by Dr. Alexander G. Dumas and Grace King (Minneapolis: University of Minnesota Press. 1945. Pp. 214. \$2.00) is a popularly written text whose subject has been well presented by the authors.

Soldier of Liberty, by Clarence A. Manning (New York: Philosophical Library. 1945. Pp. 304. \$3.00). This biography of Count Casimir Pulaski describes in some detail his early life in Poland from 1757 to 1771, his military exploits and training, and the events which brought him to aid the American Revolution in 1777. Brigadier General Pulaski's attempts to forge a strong cavalry arm are recounted and the book ends with his untimely death at the siege of Savannah on October 11, 1779.

Patton, Fighting Man, by William B. Mellor (New York: G. P. Putnam's Sons. 1946. Pp. 245. \$3.00) does not do justice to this great field commander. The photographs from the Patton archives are well chosen and present a much bet-

*Mr. Stansfield, as Librarian of the American Military Institute, is custodian of the historical files of the Order of Indian Wars, which were deposited in the Library some years ago.

*Mr. Young formerly had charge of the War Department collection of Confederate records in the National Archives and is now Assistant Archivist of the Firestone Rubber Company.

ter appreciation than the too popularized text.

Richard Hubler's *I've Got Mine* (New York: E. P. Dutton, 1946. Pp. 216. \$2.50) is the fictional story of a Marine commando raid on the Jap-held Choiseul Island in which the contrasting perspectives of a World War I veteran and a youth of this war are seen as they bring a French planter and his daughter back to American hands.

General Washington's Swords and Campaign Equipment (Mount Vernon, Va.: The Mount Vernon Ladies' Association, 1945. Pp. 60. \$0.50) is an illustrated catalogue of the military memorabilia at Mount Vernon. It is of particular value to those interested in the American Revolution. A 16-page introduction precedes 16 black and white plates.

The Royal Armoured Corps, by Frank Owen and H. W. Atkins (London: His Majesty's Stationery Office, 1945. Pp. 70. One shilling) is well worth reading by the student as it briefly presents the training of a corpsman until he saw battle in North Africa. Its excellent illustrations and maps enhance its value to the general reader.

Two other British publications of interest are *Build the Ships* by V. S. Prickett (London: His Majesty's Stationery Office, 1946. Pp. 63. Free) which is the popular official story of the shipyards in wartime and *It Can Now Be Revealed* (London: British Railways Press Office, 1945. Pp. 64. Free) which is an account of the achievements of certain railroads in this war.

The entire March 1946 issue of the *American Journal of Sociology* (Chicago: University of Chicago Press, 1946. Pp. 50. \$1.00) is devoted to the social psychology of military life and attempts to describe various aspects of the transformation of the civilian into the fighting man. These explanatory papers were written by young social scientists who served in the different branches of the armed services. It is impossible to survey the papers in adequate fashion here. The approach is one of great significance, however, and the entire issue is well worth reading.

An interesting story of a post is to be found in the "History of Fort Wayne" by Louis Prance and James R. Irwin in *Michigan History Magazine*, January-March 1946, pp. 5-40.

One of the most interesting recent items in the field of military antiquities is Arthur Woodward's articles concerning tomahawks and their use comprising the entire *Bulletin of the Fort Ticonderoga Museum*, January 1946, pp. 1-42. This well illustrated history includes an extensive bibliography on the subject.

Jungle Victory (Melbourne: Director General of Public Relations, 1945. Pp. 64) presents the New Guinea campaign of January to September 1943 and is a reprint of four separate publications concerned with "The Australian Army at War."

Commonsense Shotgun Shooting, by Fred Etchen. (Huntington, W. Va.: Standard Publications, 1946. Pp. 187. \$6.00.) In his introduction Nash Buckingham points out the author's attention to the fundamentals of practical shotgun-nery based upon his championship shooting as well as his school of shooting and considers the book a "must."

Arms and Policy, by Hoffman Nickerson (New York: G. P. Putnam's Sons, 1945. Pp. 356. \$3.50) is a thought-provoking work particularly in its arguments regarding future United States military policy and in his answers to the query: Must We Have World War III? The author's summary of the progress of World War II as well as his opinions are well worth reading even if only as the basis for further discussion.

If Men Want Peace, edited by Professors Joseph B. Harrison, Linder A. Minder, and Nathaniel H. Engle (New York: The Macmillan Company, 1946. Pp. 292. \$2.50). This integrated symposium on the mandates of world order was prepared for the general public by members of the faculty of the University of Washington. It is concerned with discussion of four broad fields: the maintenance of peace, political and human rights, economic and social welfare, and the cultural bases of world order.

Nationalities and National Minorities, by Oscar I. Janowsky (New York: The Macmillan Company, 1945. Pp. 232. \$2.75) presents the problem of the breaking-up of East-Central Europe and its proposed solution by the author's plan which is based on national federalism and economic unity as evidenced by his examples of the Soviet Union, South Africa, and Switzerland.

The Army Industrial College through its Department of Research held many conferences regarding the historical program of the War and Navy Departments during 1945. These meetings included two on the Navy, Army Ordnance Department, Signal Corps, Air Forces, Quartermaster Corps, Medical Department, and Transportation Corps. Two publications concerned with *The Reorganization of the War Department of 9 March 1942* and *Military Training* are part of a large series prepared as the result of seminars held at the college and provide in mimeographed

form important information regarding many aspects of our war effort.

The Orientation Branch, Information and Education Division, ETO, USA, has prepared and had printed in Paris over forty pamphlet histories of infantry, airborne, and armored divisions, units of the 9th Air Force, and ETO service organizations. Other publications of interest are *19 Days from the Apeninnes to the Alps: A Story of the 5th Army Po Valley Campaign*; the story of Remagen Bridge exploits of the Ninth Armored Division, entitled *The Bridge*, and an account of the *75th Infantry Division in Combat*, December 23, 1944-April 15, 1945.

The National Archives has prepared two important publications relating to the German and Japanese surrender documents: *Germany Surrenders Unconditionally* (Washington, D. C.: Government Printing Office. 1945. Pp. 41. \$0.30) containing a history of the surrender ceremonies, the ceremonies incident to the opening of the exhibit and unusually good 8x10 inch facsimile reproductions of all documents; and *The End of the War in the Pacific* (Washington, D. C.: Government Printing Office. 1945. Pp. 24. \$0.30), similar in content and appearance, providing a permanent record of the end of World War II.

Two official reports which are of special interest to the military historian are: *The Third Report of the Commanding General of the Army Air Forces to the Secretary of War, 12 November 1945* (Washington, D. C.: Headquarters Army Air Forces. Pp. 72), in which General Arnold sums up the accomplishments shown by photographs and diagrams of the Air Forces and concludes with a very valuable discussion of the future role of the Army Air Forces; and the final official report of Fleet Admiral Ernest J. King, *U. S. Navy at War, March 1 to October 1, 1945* (Washington, D. C.: The United States News. Pp. 72), which provides another valuable reference work since it contains an official summary of naval operations and provides statistics relating to the American and Japanese Navies.

Thoughts on War, by Captain Liddell-Hart (London: Faber and Faber, Ltd., 1944; Forest Hills, New York: Transatlantic Arts, 1945. Pp. 327. \$5.50). Captain Liddell-Hart's reflections and conclusions from 1919 to 1939 have been collated and classified under three major headings: elements of war, conduct of war, and conduct of military operations. Provided with a subject index to thoughts as well as a general index, this com-

pilation provides a permanent summation of one of the great military writers of our time.

The Golden Carpet, by Captain Somerset de Chair (New York: Harcourt Brace and Company. 1945. Pp. 252. \$3.50) is the fascinating account of the adventures of a British column *Kingcol* of 750 men under Brigadier Joe Kingstone which was sent from Palestine to capture Baghdad in the spring of 1941 as seen by its intelligence officer. Originally published in two volumes, *Kingcol* and *The Silver Crescent* have been printed in this volume with added comments by Glubb Pasha, head of the Auxiliary Bedouin Desert Group. Its official photographs add much zest to the vivid narration of events by this young M.P. whose exploits have been favorably compared to those of Lawrence of Arabia, but whose achievements can stand on their own feet.

Desert Episode, by George Greenfield (New York: The Macmillan Company. 1945. Pp. 130. \$1.75) is an account of part of the battle of El Alamein in 1942 as seen from the point of view of the captains of two infantry companies leading the attack. The reality of desert warfare and the psychological reactions of the officers and men in this novel are portrayed with striking clarity.

This Must Not Happen Again, by Clark Kinnard (New York: Howell, Soskin, Publishers. 1945. Pp. 160. \$2.00) contains shocking photographs of Japanese and German concentration camps. It was prepared as a pictorial reminder of the degree of brutality beyond the laws of war which has been manifested by these governments in their treatment of prisoners.

The Garrison of Fort Bliss, 1849-1916, by Colonel M. H. Thomlinson (El Paso: Carl L. Hertzog. 1945. Pp. 39. \$2.00) presents in chronological form the rosters of troops stationed there and interesting events at the post. Illustrations show the post's appearance at various times. The end paper maps of surrounding camps and the army supply routes of 1851 are also of interest. It is to be hoped that a more detailed account of the post will be written based upon this excellent beginning.

India and the Indian Ocean, by K. M. Pannikar (New York: The Macmillan Company. 1945. Pp. 109. \$1.75) is a succinct historical essay on the influence of sea power on India emphasizing the part that India has played in the past in the navigation and control of its seas by European nations. The importance of sea power in the future of India is developed through a carefully reasoned discussion based upon Mahan.

Pimbley's Dictionary of Heraldry (New York:

Paul A. Struck. 1945. Pp. 104. \$2.00) contains brief definitions, unusually illustrated, of common terms used in the descriptions of armorial bearings.

The History and Disposition of a Powder Plant Project, Nitro, West Virginia, 1917-1942, by Mrs. Dorothy B. Howard (Washington, D. C.: U. S. Department of Labor. 1945. Pp. 80. Mimeographed. Free) is a detailed history of this project based on records in the National Archives. It presents a well written account of the disposal methods of World War I which are of contemporary concern.

RAF Middle East (London: His Majesty's Stationery Office. 1945. \$0.55) is the official story of air operations in North Africa and the Mediterranean from February 1942 to January 1943. This account describes the development of a new kind of air power trained in cooperation with land and sea forces during these critical months and 130 illustrations and maps enable the reader to obtain a clear picture of developments.

The Historical Collection of the Insurance Company of North America, by M. J. McCosker (Philadelphia: Insurance Company of North America. 1945. Pp. 176) is a beautifully edited description of the Company's collection at the home office in Philadelphia. The marine section of paintings, prints, and ship models related to the archives of a company whose marine policies were issued as early as the 1790's provides particular interest for the naval historian.

Morning Will Come, by Gordon Waterfield (London: John Murray; Forest Hills, New York: Transatlantic Arts. 1944. Pp. 198. \$3.25) presents an English journalist's life from 1940 to 1943 and his observations of Africa and the East in relation to the post-war world.

The Story of HMS Victory, by F. W. Engholm (London: Lindsay Drummond, Limited; New York: Transatlantic Arts. 1944. Pp. 55. \$3.00) is a historical account of Nelson's flagship containing many unusual sketches.

RECENT BOOKS

INSTITUTIONS AND CULTURE

Post War Developments

The Veteran's Best Opportunities, by Lt. Commander Edward R. Fiske. (New York: Duell, Sloan and Pearce, Inc. Pp. 335. \$2.50.)

The Case Against the Nazi War Criminals, by Robert H. Jackson. (New York: Alfred A. Knopf, Inc. 1946. Pp. 229. \$2.00.)

Peace, Security, and the United Nations, edited by Hans J. Morgenthau. (Chicago: University of Chicago Press. 1946. Pp. 133. \$1.50.)

What It Takes to Rule Japan, by Major Harold J. Noble. (New York: U. S. Camera. 1946. Pp. 96. \$1.50.)

Why Smash Atoms? by Arthur K. Solomon. (Cambridge, Mass.: Harvard University Press. 1946. Pp. 216. \$3.00.)

How to Be a Civilian, by Morton Thompson. (Garden City, N. Y.: Doubleday Doran and Company. 1946. Pp. 220. \$2.00.)

Contemporary Scene

Contemporary Foreign Governments, by Colonel Herman Beukema and others. (New York: Rinehart and Company. 1946. Pp. 383. \$3.50.)

Japan's War Economy, by Thomas A. Bisson. (New York: The Macmillan Company. 1945. Pp. 282. \$3.50.)

The Ciano Diaries, by Count Galeazzo Ciano. (New York: Doubleday Doran and Company. 1946. Pp. 615. \$4.00.)

World War: Its Cause and Cure, by Lionel Curtis. (New York: Oxford University Press. 1945. Pp. 295. \$3.25.)

The Secret History of the War, by Waverley L. Root. (New York: Charles Scribner's Sons. 1946. Pp. 484. \$5.00.)

National Warfare

The Story of the Stars and Stripes, by Bud Rooney and Andy Hutton. (New York: Rinehart and Company. 1946. Pp. 251. \$3.00.)

Prussian Military Reform, by William O. Shanahan. (New York: Columbia University Press. 1946. Pp. 270. \$3.25.)

MILITARY AND NAVAL OPERATIONS

World War II

They Shall Live Again, by Marguerite T. Boylan. (New York: Cosmopolitan Science and Art Service Co., Inc. 1946. Pp. 182. \$2.25.)

British Soldier in India, by Clive Branson. (New York: International Publishers. 1946. Pp. 123. \$1.25.)

- Red Arrow Men*, by John M. Carlisle. (Detroit: Arnold Powers. 1946. Pp. 215. \$2.50.)
- Radar*, by Orrin Elmer Dunlap, Jr. (New York: Harper and Brothers. 1946. Pp. 222. \$2.50.)
- Man of Brittany*, by Selwyn James. (New York: Simon and Schuster. 1946. Pp. 326. \$2.50.)
- P. O. W.*, by Guy Morgan. (New York: Whittlesley House, McGraw-Hill. 1946. Pp. 227. \$2.50.)
- Escape in Italy*, by Lieutenant William L. Newman. (Ann Arbor: University of Michigan Press. 1946. Pp. 48. \$2.50.)
- Doughboy Chaplain*, by Captain Edward K. Rogers. (Boston: Meador Publishing Company. 1946. Pp. 230. \$2.00.)
- In Line of Duty*, by Francis P. Scannell. (New York: Harper and Brothers. 1946. Pp. 302. \$2.50.)
- On to Westward*, by Robert L. Sherrod. (New York: Duell, Sloan, and Pearce. 1945. Pp. 348. \$3.00.)
- The House Near Paris*, by Drue and Werner Tartière. (New York: Simon and Schuster. 1946. Pp. 326. \$2.75.)
- We Are the Wounded*, by Keith Wheeler. (New York: E. P. Dutton Company. 1945. Pp. 224. \$2.50.)

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- The Jesse James of the Java Sea*, by Carl Carmer. (New York: Farrar and Rinehart, Inc. 1945. Pp. 119. \$1.50.)
- Navy Nurse*, by Page Cooper. (New York: Whittlesley House, McGraw-Hill. 1946. Pp. 236. \$2.50.)
- From Omaha to Okinawa*, by William Bradford Huie. (New York: E. P. Dutton Company. 1945. Pp. 321. \$2.75.)
- It's Tomorrow, Out Here*, by Lt. Comdr. Max Miller. (New York: Whittlesley House, McGraw-Hill. 1945. Pp. 186. \$3.00.)
- Air Commando Doc*, by Lt. Col. Robert C. Page. (New York: Bernard Ackerman. 1945. Pp. 186. \$2.50.)
- We Were WASPS*, by Winifred Wood. (Coral Gables, Fla.: Glade House. 1946. Pp. 195. \$2.50.)

Air Warfare

- Eddie Rickenbacker*, by Hans C. Adamson. (New York: The Macmillan Company. 1946. Pp. 309. \$2.75.)
- The Aircraft Annual*, edited by David C. Cooke. (New York: Robert M. McBride. 1946. Pp. 304. \$3.00.)

- The Aircraft Yearbook for 1945*, by Howard Mingos. (New York: Lanciar Publications. 1945. Pp. 688. \$6.00.)
- Aviation*, by Henry E. Wimpenna. (New York: Oxford University Press. 1946. Pp. 184. \$1.25.)

National Warfare

- The Last Trek of the Indians*, by Grant Foreman. (Chicago: University of Chicago Press. 1946. Pp. 382. \$4.00.)
- The Great War for the Empire. The Years of Defeat, 1754-1757*, by Lawrence H. Gipson. (New York: Alfred A. Knopf. 1946. Pp. 501. \$7.50.)
- American Chemical Industry. The World War I Period*, by William Haynes. (New York: The Van Nostrand Company. 1946. Pp. 483. \$8.00.)
- Mr. Lincoln's Camera Man*, Mathew B. Brady, by Roy Meredith. (New York: Charles Scribner's Sons. 1946. Pp. 381. \$7.50.)
- Lincoln the President*, by James Garfield Randall. (New York: Dodd, Mead and Company. 1945. 2 vols. Pp. 416; 446. \$7.50.)
- An Introduction to the Papers of the New York Prize Court*, by Madeline R. Robinton. (New York: Columbia University Press. 1945. Pp. 203. \$2.75.)
- The East India Company and the British Empire in the Far East*, by Mrs. Marguerite K. E. Wilbur. (New York: Richard R. Smith. 1945. Pp. 590. \$7.50.)

Fiction and Poetry

- Remembered Anger*, by Martha Albrand. (Boston: Little, Brown and Company. 1946. Pp. 178. \$2.00.)
- Of Many Men*, by James Aldridge. (Boston: Little, Brown and Company. Pp. 307. \$2.50.)
- Ward Twenty*, by James W. Bellah. (New York: Doubleday, Doran and Company. 1946. Pp. 166. \$2.00.)
- Beach Red*, by Peter Bowman. (New York: Random House. 1946. Pp. 122. \$2.50.)
- War and the Poet*, edited by Lt. Comdr. Richard Eberhart, Rodman Eberhart, and M/Sgt. Selden. (New York: Devin Adair Company. 1945. Pp. 285. \$3.00.)
- Guy Kilpatric's Flying Stories*, by Guy Kilpatric. (New York: E. P. Dutton and Company. 1946. Pp. 287. \$2.50.)
- Red Rain*, by Leslie Kark. (New York: The Macmillan Company. 1946. Pp. 254. \$2.50.)

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Accolade



COL. CHARLES H. TAYLOR

To Colonel Charles H. Taylor, editor and principal author of *Omaha Beachhead*,* and to his collaborators, for a masterful demonstration of what the "New Military History" can do in setting forth what really happened in an important operation. The newspapers didn't tell us at the time. And not merely because of the requirements of military security. The newspaper correspondents didn't know, because the generals didn't know and because the GI's didn't know. What happened was too massively complex and disorderly for anyone to grasp in overview and in detail at the time. Nor could the orthodox techniques for writing military history long after the events have recovered much of the real story. For the reports and other documents of the time were written in the midst of the "fog of war," while recollections

of participants unfortunately become fermented with imagination in a little while. Only the new techniques that involve historians following close after the military operations in the field and interviewing participants almost on the spot could have yielded the mass of accurate detail on which this narrative has laid down its broad and level highway to understanding. One sees here how cold, clear realism, without any resort to dramaturgical devices, can present a drama too stupendous to be depicted adequately by any impressionistic form of art.

Omaha Beachhead is one of a series of historical studies that General Marshall directed to be prepared in order that wounded men might know how they had played their part and been wounded in a "good fight" and not in just a welter of tragic and senseless accidents. This mission of writing military history for the man "who was there" and who now lay on a hospital cot means that there could be no tomfoolery with the facts, with the awful dignity of the plain and simple facts. It was a supreme test to which the writing of military history has never been subjected before. This narrative exemplifies how well that test has been met: faithfully and without stint of thoughtfulness or effort. Those of us who didn't go in over the beach on D-Day and up those dreadful bluffs—as nonentities in face of anonymous malice—will never know what all the "shouting and the tumult" was about unless we read this book or another like it.

*Washington, D. C.: Historical Division, U. S. War Department, 1946. Pp. 167 plus folding maps. For sale by the Superintendent of Documents, U. S. Government Printing Office, Washington 25, D. C. \$1.50.